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INSURANCE COLLISION REPORT

Passenger Cars, Vans, Pickups, And Utility Vehicles

Highway Loss Data Institute
R86-2

Highway Loss Data Institute
Insurance Collision Report

1986 Models During Their First Year
1985 Models During Their First Two Years
1984 Models During Their First Three Years
HLDI R86-2

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SUMMARY

This Highway Loss Data Institute report describes variations in both the frequencies and the sizes of collision coverage claims for damage to 1984, 1985, and 1986 model year passenger cars, vans, pickups, and utility vehicles.

Passenger Cars

- Among 1986 vehicles, the Chevrolet Astro Van* had the best overall collision coverage results and the Chevrolet Corvette had the worst.
- Ten of the fifteen 1986 models with the best results were domestic passenger vans or station wagons.
- Eleven of the fifteen 1986 models with the worst results were sports and specialty models; many of them were imported.
- Collision coverage results for 1986 models continue to show substantial variations among vehicles grouped by size and body style. In many cases, the best and worst results for cars of the same size and body style vary by a factor of two or more.
- Most vehicles with the best collision coverage results are domestic models and most with the worst results are imported models.
- Claim frequencies, average loss payments per claim, and average loss payments per insured vehicle year generally decreased with increasing vehicle size in all body style groups.
- For vehicles that have not been substantially redesigned, collision coverage loss results are generally consistent from one model year to the next.

Vans, Pickups, Utility Vehicles

- Among all vans, pickups, and utility vehicles, small utility vehicles and small pickups had the highest average loss payments per insured vehicle year; vans and large utility vehicles had the lowest.
- For all three model years, the Ford E-150 Club Wagon had the lowest average loss payment per insured vehicle year and the Toyota 4Runner pickup truck had the highest.
- For all three model years, the Jeep CJ-7 had the highest average loss payment per claim.
- For the three model years, Toyota pickup trucks generally had results that were worse than the all-passenger-car results.
- For pickup trucks and utility vehicles, results were clearly related to vehicle size with smaller vehicles having higher average loss payments per insured vehicle year than larger vehicles.
- For each of the three model years, small pickups and standard pickups had similar average loss payments per claim, but the small pickups had significantly higher claim frequencies.
- For each of the three model years, small, intermediate, and large utility vehicles had similar claim frequencies, but the average loss payments per claim decreased with increasing vehicle size.

*In recent years, a number of manufacturers produced vans that are predominantly aimed at the passenger car market. These vehicles have attributes of both station wagons and vans. In this report the passenger carrying versions are grouped with station wagons and the cargo carrying versions are grouped with regular vans.

INTRODUCTION

The Highway Loss Data Institute (HLDI) — a nonprofit, public service organization — gathers, processes, and summarizes insurance data. Its research addresses the human and economic losses resulting from owning and operating motor vehicles, especially the ways such losses vary among different kinds of vehicles.

This report describes the collision coverage results of 1986 models during their first year of availability, 1985 models during their first two years, and 1984 models during their first three years. Results are presented for passenger cars, and for vans, pickup trucks, and utility vehicles.*

This report is based on collision coverage and loss data supplied by 13 insurers: Aetna, Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, Sentry, State Farm, Travelers, and USAA. Detailed explanations of data sources and methods of analysis are given in HLDI Report R86-1. A complete list of the vehicle classifications by make, series, body style, and size class appears in Appendix A, and definitions are given in Appendix B.

It is intended that the dissemination of this and other HLDI reports will contribute to research into ways for reducing vehicle-related damage to people and property, and also provide the public with information relating to the differences in the crash damage produced by different kinds of vehicles.

RESULTS AND DISCUSSION

The results in this report are presented in two sections. The first section summarizes variations in both the frequencies and the sizes of collision claims for damage to private passenger cars from three model years: 1986 models during their first year of availability, 1985 models during their first two years, and 1984 models during their first three years. The second section contains similar summaries for vans, pickups, and utility vehicles insured under noncommercial collision coverages.

The results were standardized to minimize differences that might be attributable to variations in the mix of deductible amounts and operator age groups among different vehicles. Both the frequency and average size of collision coverage losses vary with the deductible amount and the age group of the operators. Standardizing these two nonvehicle factors ensures that their mix is the same for each result. Therefore, to the extent that the distributions of age within each operator age group and amounts within each deductible group do not vary substantially for different vehicles, these effects cannot bias comparisons among the various results. Other nonvehicle factors have not necessarily been eliminated from the results presented in this report.

All of the results are shown in relative terms, with 100 representing the average for *all passenger cars* of each model year. Thus, for example, the relative average loss payment per insured vehicle year of 44 for the 1986 Chevrolet Astro Van (Table 1) indicates a result that is 56 percent below the result for all 1986 model year passenger cars combined; the Chevrolet Corvette's result of 305 indicates that its average loss payment per insured vehicle year was more than triple the result for all 1986 passenger cars. The results for vans, pickup trucks, and utility vehicles are also shown relative to the all-passenger-car results for each model year.

Passenger Cars

The results for passenger cars are presented by body style within each of the three vehicle size categories — small, midsize, and large. Appendix B contains a full description of the HLDI system for classification of passenger cars by body style and size. The results for the 1986 model year passenger cars are based on approximately 1.1 million insured vehicle years of exposure, those for the 1985 models on approximately 4.5 million insured vehicle years, and those for the 1984 models on more than 8.5 million insured vehicle years. Results are not given for any individual vehicle series with less than 1,000 insured vehicle years of exposure. Generally, the greater the exposure associated with a result, the more confidence can be placed in it.

1986 Models During Their First Year Table 1 summarizes the 1986 model year passenger cars with the lowest and highest relative average loss payments per insured vehicle year during their first year of availability. The average loss payment per insured vehicle year combines claim frequency and average loss payment per claim and thus accounts for not only how often collision claims are made but also the magnitude of such claims. The vehicles listed in Table 1 were taken from the 189 individual 1986 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1986 vehicles combined were 10.8 for claim frequency, $1,771 for average loss payment per claim, and $191 for average loss payment per insured vehicle year.

Large domestic models dominated the list of vehicles having the best overall collision coverage results. The Chevrolet Astro Van (44) had the lowest average loss payment per insured vehicle year. Four other models also had results less than half the 1986 all-passenger-car result — GMC Safari Van (46), Ford LTD station wagon (46), Pontiac Parisienne station wagon (47), and Dodge Caravan (48). These five models were either passenger vans or station wagons as were five of the ten remaining vehicles listed in Table 1 with the lowest average loss payments per insured vehicle year. Both the four-door and station wagon versions of the Pontiac Parisienne were among the vehicles with the best results. The Ford Escort station wagon was the only small vehicle among those with the best results, and no imported models were included.

Imported models dominated the list of vehicles with the worst overall collision coverage results. However, the Chevrolet Corvette (305) had the worst result with a value that was more than triple the 1986 all-passenger-car result. The Porsche 944 Coupe (271) and BMW 500 Series (228) were

*A separate, supplemental volume to this report, *Appendices to R86-2*, is available upon request. It contains detailed claim frequency and average loss payment per claim results for two classes of deductibles and for youthful and no youthful operators. The supplement also provides separate, detailed results by year of availability for 1984 and 1985 models.

Table 1
Relative Average Loss Payments Per Insured Vehicle Year for 1986 Model Year Passenger Cars With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
Chevrolet Astro Van	P.V.	Large	44	Chevrolet Corvette	Sp.	Small	305
GMC Safari Van	P.V.	Large	46	Porsche 944 Coupe	Sp.	Small	271
Ford LTD	S.W.	Midsize	46	BMW 500 Series	Sp.	Midsize	228
Pontiac Parisienne	S.W.	Large	47	Subaru XT Coupe	2 Dr.	Small	197
Dodge Caravan	P.V.	Large	48	Mazda RX-7	Sp.	Small	189
Ford Crown Victoria	4 Dr.	Large	52	Pontiac Firebird	Sp.	Midsize	187
Mercury Grand Marquis	4 Dr.	Large	54	Nissan 300ZX 2+2	Sp.	Small	182
Dodge Diplomat	4 Dr.	Large	54	Toyota Celica Supra	Sp.	Midsize	177
Plymouth Voyager	P.V.	Large	56	BMW 325e 2D	Sp.	Midsize	177
Ford Taurus	S.W.	Midsize	57	Nissan 300ZX	Sp.	Small	176
Pontiac Parisienne	4 Dr.	Large	57	Chevrolet Camaro	Sp.	Midsize	175
Chevrolet Celebrity	S.W.	Midsize	59	Ford EXP	Sp.	Small	174
Chevrolet Caprice	4 Dr.	Large	59	Volkswagen GTI	2 Dr.	Small	172
Pontiac 6000	S.W.	Midsize	60	Nissan 200SX	2 Dr.	Small	165
Ford Escort	S.W.	Small	60	Dodge Daytona	2 Dr.	Small	164

P.V. = Passenger Van, S.W. = Station Wagon, Sp. = Sports or Specialty
*100 represents the average for all 1986 passenger cars ($191)

the only other vehicles with results more than twice the 1986 average. The vehicles with the worst results were predominantly sports and specialty models and the remainder were small two-door vehicles.

Detailed collision coverage results for all 1986 model year vehicles with at least 1,000 insured vehicle years of exposure are given in Table 4 (page 6). The values displayed are total exposure, measured in insured vehicle years, and relative values for three loss categories — claim frequency per 100 insured vehicle years, average loss payment per claim, and average loss payment per insured vehicle year. The value 100 corresponds to the average result for all vehicles in each loss category. The individual series are listed in ascending sequence of the relative average loss payment per insured vehicle year within each size and body style subgroup.

The Subaru XT Coupe (165) had the highest relative claim frequency and the Dodge Diplomat (57) had the lowest. The Chevrolet Corvette (290) had the highest average loss payment per claim (more than $5,100). In contrast, the Chevrolet Astro Van (47) had the lowest average loss payment per claim of $840. It was the only vehicle with an average loss payment per claim less than half the 1986 all-car result.

As has been the case in previous years, the collision coverage results for 1986 models continue to show substantial variations among vehicles grouped by size and body style. In many cases, the best and worst results for cars of the same size and body style vary by a factor of two or more.

Table 4 also shows that claim frequencies, average loss payments per claim, and average loss payments per insured vehicle year generally decreased with increasing vehicle size in each body style group. For example, two-door vehicles as a group had the following relative claim frequencies for the three size classes: small (124), midsize (105), and large (76).

1985 Models During Their First Two Years Table 2 summarizes the best and worst collision coverage results for 1985 model year passenger cars during their first two years of availability. The vehicles listed in Table 2 were taken from the 237 individual 1985 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1985 vehicles combined for both years of availability were 10.5 for claim frequency, $1,666 for average loss payment per claim, and $176 for average loss payment per insured vehicle year.

The GMC Safari Van (48) had the lowest average loss payment per insured vehicle year, and it was the only vehicle with a result less than half the 1985 overall result. All of the vehicles with the best results were large domestic models and each of these vehicles' results was at least 38 percent below the 1985 overall result. Two-door and four-door versions of the Mercury Grand Marquis and Oldsmobile Delta 88, as well as the Pontiac Parisienne four-door and station wagon models, were among the vehicles having the lowest results.

Similar to the 1986 results, many of the vehicles with the highest overall losses were imported models and most were sports and specialty models. The Dodge Conquest (287) had the highest average loss payment per insured vehicle year. The Dodge Conquest and the Plymouth Conquest are manufactured jointly by Chrysler Corporation and Mitsubishi and are imported from Japan. Two-thirds of the vehicles with the worst results had a result that was more than double the 1985 all-passenger-car result.

Detailed collision coverage results for all 1985 models with at least 1,000 insured vehicle years of exposure are given in Table 5 (page 12). The results displayed are the combined results for the first two years of the 1985 models and are presented by vehicle size group and body style subgroup.

The Audi GT Coupe (184) had the highest relative claim frequency. The Subaru XT Coupe (182) was the only other vehicle with a claim frequency more than 80 percent above the 1985 combined claim frequency. The Mercedes 380 SL Coupe (60) and the four-door Ford Crown Victoria (60) had the lowest claim frequencies. The BMW 635 CSi (275) had the highest average loss payment per claim of approximately $4,600. The GMC Safari Van (57) had the lowest average loss payment per claim at just over $950. The Chevrolet Astro Van (59) was the only other vehicle with an average loss payment per claim under $1,000.

The results for 1985 models in Table 5 are very similar to those for the 1986 models in Table 4; frequently, vehicles with the best results are separated from those with the worst results within the same body style and car size group by a factor of two or more, and collision loss results tend to decrease with increasing vehicle size for each of the body style groups.

1984 Models During Their First Three Years Table 3 summarizes the 1984 model year passenger cars with the best and worst collision coverage results during their first three years of availability. The vehicles listed were taken from the 233 individual 1984 vehicle series that had more than 1,000 insured vehicle years of exposure. The standardized results for all 1984 vehicles combined for all three years of availability were 10.1 for claim frequency, $1,573 for average loss payment per claim, and $158 for average loss payment per insured vehicle year.

Fourteen of the 16 vehicles with the lowest average loss payments per insured vehicle year were large cars, and all 16 were domestic models. Among these vehicles, the two-door Oldsmobile Ninety-Eight (50) had the best result. Both the two-door and four-door models of the Ford Crown Victoria, Mercury Grand Marquis, and Oldsmobile Ninety-Eight had results that were among the best, as did the four-door and station wagon models of the Pontiac Parisienne.

All 15 of the vehicles with the worst collision coverage loss results were imported models; the Dodge Conquest and Plymouth Conquest are imported models manufactured jointly with Mitsubishi. The Porsche 928 Coupe had an average loss payment per insured vehicle year that was more than three times the average for all 1984 vehicles. The results for all but two of the other vehicles with the worst results exceeded the average by at least a factor of two. The BMW 733i was the only large vehicle included among those with the worst results.

Table 2
Relative Average Loss Payments Per Insured Vehicle Year for 1985 Model Year Passenger Cars With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
GMC Safari Van	P.V.	Large	48	Dodge Conquest	2 Dr.	Small	287
Ford Crown Victoria	4 Dr.	Large	53	Audi GT Coupe	2 Dr.	Midsize	263
Chevrolet Astro Van	P.V.	Large	53	BMW 635CSi	Sp.	Midsize	257
Mercury Grand Marquis	2 Dr.	Large	54	Mitsubishi Starion	2 Dr.	Small	246
Mercury Grand Marquis	4 Dr.	Large	55	Volkswagen Scirocco	2 Dr.	Small	241
Oldsmobile Delta 88	4 Dr.	Large	56	Porsche 944 Coupe	Sp.	Small	231
Plymouth Voyager	P.V.	Large	58	Plymouth Conquest	2 Dr.	Small	218
Oldsmobile Custom Cruiser	S.W.	Large	58	Nissan 300ZX	Sp.	Small	211
Chevrolet Impala	4 Dr.	Large	58	Audi 4000 Quattro	Sp.	Small	206
Dodge Caravan	P.V.	Large	59	Jaguar XJS	Sp.	Midsize	205
Buick LeSabre	4 Dr.	Large	59	Chevrolet Corvette	Sp.	Small	194
Pontiac Parisienne	4 Dr.	Large	60	BMW 500 Series	Sp.	Midsize	190
Chevrolet Caprice	4 Dr.	Large	60	Merkur XR4Ti	Sp.	Midsize	190
Pontiac Parisienne	S.W.	Large	61	Pontiac Firebird	Sp.	Midsize	189
Oldsmobile Delta 88	2 Dr.	Large	62	Toyota MR2	Sp.	Small	186

P.V. = Passenger Van; S.W. = Station Wagon; Sp. = Sports or Specialty
*100 represents the average for all 1985 passenger cars ($176).

Table 3
Relative Average Loss Payments Per Insured Vehicle Year for 1984 Model Year Passenger Cars With the Best and Worst Collision Coverage Results*

Best Results				Worst Results			
Oldsmobile Ninety Eight	2 Dr.	Large	50	Porsche 928 Coupe	Sp.	Small	316
Mercury Grand Marquis	4 Dr.	Large	56	Plymouth Conquest	2 Dr.	Small	264
Ford Crown Victoria	2 Dr.	Large	57	BMW 733i	Sp.	Large	250
Ford Crown Victoria	4 Dr.	Large	58	Mitsubishi Starion	2 Dr.	Small	248
Oldsmobile Delta 88	4 Dr.	Large	59	Porsche 944 Coupe	Sp.	Small	248
Chevrolet Caprice	4 Dr.	Large	60	Audi 4000 Quattro	Sp.	Small	241
Pontiac Parisienne	S.W.	Large	62	Jaguar XJS	Sp.	Midsize	240
Plymouth Voyager	P.V.	Large	62	Nissan 300ZX	Sp.	Small	239
Pontiac Parisienne	4 Dr.	Large	63	Dodge Conquest	2 Dr.	Small	222
American Eagle	4 Dr.	Midsize	63	BMW 633CSi	Sp.	Midsize	210
Chevrolet Impala	4 Dr.	Large	64	Audi 4000	2 Dr.	Midsize	206
Chevrolet Caprice	S.W.	Large	64	Alfa Romeo Spider Veloce	Sp.	Small	202
Oldsmobile Ninety Eight	4 Dr.	Large	64	BMW 300 Series	Sp.	Midsize	201
Mercury Grand Marquis	2 Dr.	Large	65	Nissan 300ZX 2+2	Sp.	Small	196
Buick LeSabre	4 Dr.	Large	66	Volkswagen Scirocco	2 Dr.	Small	187
Oldsmobile Cutlass	4 Dr.	Midsize	66				

P.V. = Passenger Van. S.W. = Station Wagon. Sp. = Sports or Specialty.
*100 represents the average for all 1984 passenger cars ($158).

Detailed collision coverage results for all 1984 models with at least 1,000 insured vehicle years of exposure are given in Table 6 (page 20). The results displayed are the combined results of the first three years for the 1984 models.

The Mitsubishi Starion (179) had the highest relative claim frequency; the Audi 4000 Quattro (177) and Plymouth Conquest (169) also had claim frequency results that exceeded the 1984 overall result by more than 60 percent. The four-door American Eagle (61) had the lowest relative claim frequency. For 1984 models, the Porsche 928 Coupe (256) had the highest average loss payment per claim of more than $4,000, and the Volkswagen Vanagon (64) had the lowest, which was approximately $1,000.

Consistency of Model Year Results The collision loss results for individual vehicle series are generally consistent from one model year to the next. For example, the four-door Mercury Grand Marquis, a vehicle with good results among large four-door models, had very consistent results for the three model years. The ranges for the three loss measures were: claim frequency, 63-67; average loss payment per claim, 85-88; and average loss payment per insured vehicle year, 54-56. Similarly, the Mitsubishi Tredia, a vehicle with poor results among small four-door models, had consistent results in all three model years for each collision loss measure. Its ranges were: claim frequency, 133-138; average loss payment per claim, 106-113; and average loss payment per insured vehicle year, 142-156.

(Text continues on page 28).

TABLE 4
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	ALL	1136417	100 = 10.8	100 = $ 1771	100 = $ 191
		SMALL CARS			
TWO-DOOR MODELS		159780	124	103	127
TOYOTA	TERCEL	4444	100	78	77
YUGO	YUGO	1856	113	85	96
PONTIAC	1000	1016	103	96	99
CHEVROLET	SPRINT	4485	114	89	102
HONDA	CIVIC	9044	108	95	102
MAZDA	323	2872	109	95	103
FORD	ESCORT	21689	112	93	104
MERCURY	LYNX	3415	111	96	106
VOLKSWAGEN	GOLF	1762	108	103	112
NISSAN	SENTRA	16316	126	90	113
DODGE	COLT	4440	117	97	114
CHEVROLET	CHEVETTE	3240	124	96	119
SUBARU	HATCHBACK	1399	117	103	120
CHEVROLET	SPECTRUM	2245	122	99	121
PLYMOUTH	COLT	3573	125	101	125
HONDA	PRELUDE	8935	122	106	129
RENAULT	ALLIANCE	2376	129	107	137
TOYOTA	CELICA	12946	132	104	137
MAZDA	626	3411	137	106	145
NISSAN	PULSAR	7884	128	113	145
CHRYSLER	LASER	3163	139	104	145
MITSUBISHI	MIRAGE	2042	134	110	148
TOYOTA	COROLLA	4693	135	111	150
SAAB	900	2434	108	145	156
DODGE	CHARGER	4478	138	117	162
PLYMOUTH	TURISMO	4533	151	108	163
DODGE	DAYTONA	4029	134	123	164
NISSAN	200SX	5937	139	119	165
VOLKSWAGEN	GTI	2017	150	115	172
SUBARU	XT COUPE	1751	165	119	197

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
FOUR-DOOR MODELS		**138293**	**105**	**94**	**99**
FORD	ESCORT	9297	86	83	72
TOYOTA	TERCEL	1283	112	67	74
PLYMOUTH	HORIZON	6789	100	75	75
CHEVROLET	NOVA	11803	90	94	85
TOYOTA	COROLLA	15020	93	94	87
HONDA	CIVIC	10304	95	95	90
MERCURY	LYNX	1469	106	87	92
DODGE	OMNI	5752	107	88	94
SUBARU	GL 4WD	1258	111	90	100
SUBARU	DL/GL	4203	116	87	100
VOLKSWAGEN	GOLF	3271	108	94	102
CHEVROLET	SPECTRUM	5314	119	87	104
DODGE	COLT	3373	110	98	108
CHEVROLET	CHEVETTE	2435	111	97	108
MAZDA	626	10416	108	101	108
NISSAN	SENTRA	8679	116	94	109
VOLKSWAGEN	JETTA	9411	117	94	109
RENAULT	ALLIANCE	3217	112	98	110
MAZDA	323	5112	105	107	112
CHEVROLET	SPRINT	3860	121	93	112
SAAB	900	1620	94	121	114
PLYMOUTH	COLT	2831	117	105	122
HYUNDAI	EXCEL	4570	122	100	123
NISSAN	STANZA	2841	107	117	125
MITSUBISHI	TREDIA	1682	138	113	156
STATION WAGONS/PASSENGER VANS		**39443**	**85**	**88**	**75**
FORD	ESCORT	8033	78	77	60
TOYOTA	TERCEL 4WD	2098	58	106	62
TOYOTA	TERCEL	1979	81	84	68
HONDA	CIVIC	2540	68	103	70
TOYOTA	VAN	3032	115	67	77
NISSAN	STANZA	7961	77	102	79
SUBARU	DL/GL 4WD	5280	101	85	85
NISSAN	SENTRA	2885	99	86	85
SUBARU	DL/GL	2627	101	97	97

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
SPORTS & SPECIALTY		**45459**	**132**	**130**	**173**
VOLKSWAGEN	CABRIOLET	1123	132	92	121
HONDA	CIVIC CRX	8658	129	103	132
TOYOTA	MR2	3990	152	102	155
PONTIAC	FIERO	8774	158	102	161
FORD	EXP	1511	138	126	174
NISSAN	300ZX	4547	114	155	176
NISSAN	300ZX 2+2	1538	124	146	182
MAZDA	RX-7	5905	139	136	189
PORSCHE	944 COUPE	2268	130	209	271
CHEVROLET	CORVETTE	3690	105	290	305
		MIDSIZE CARS			
TWO-DOOR MODELS		**159762**	**105**	**97**	**102**
OLDSMOBILE	CUTLASS CIERA	3373	80	82	66
BUICK	CENTURY	1068	93	77	71
DODGE	ARIES	1218	93	78	72
CHEVROLET	CELEBRITY	2722	85	91	77
OLDSMOBILE	CUTLASS	16696	82	99	82
OLDSMOBILE	FIRENZA	1775	111	77	86
BUICK	REGAL	8624	87	101	88
CHRYSLER	LEBARON	2528	90	102	92
PLYMOUTH	RELIANT	1372	96	96	92
BUICK	SOMERSET	8271	109	85	93
FORD	TEMPO	5147	109	88	96
OLDSMOBILE	CALAIS	10170	108	89	97
PONTIAC	GRAND PRIX	3963	95	102	97
BUICK	SKYHAWK	4738	104	95	99
PONTIAC	GRAND AM	15601	105	97	102
HONDA	ACCORD	7082	101	101	103
FORD	THUNDERBIRD	14725	107	105	112
MERCURY	COUGAR	12515	109	107	117
CHEVROLET	CAVALIER	19232	129	94	122
PONTIAC	SUNBIRD	6726	136	92	125
CHEVROLET	MONTE CARLO	9299	106	119	126

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
FOUR-DOOR MODELS		284509	90	95	85
TOYOTA	CAMRY	21598	81	79	64
PLYMOUTH	CARAVELLE	2148	73	90	65
FORD	LTD	5899	77	86	65
DODGE	ARIES	3772	80	86	69
OLDSMOBILE	CUTLASS	5847	72	95	69
MERCURY	SABLE	3517	87	81	70
MERCURY	MARQUIS	3331	76	94	71
CHEVROLET	CELEBRITY	21152	82	87	71
PONTIAC	BONNEVILLE	3961	72	104	75
FORD	TAURUS	7337	86	87	75
OLDSMOBILE	FIRENZA	1508	108	71	76
OLDSMOBILE	CUTLASS CIERA	27690	76	103	78
DODGE	600	1933	79	100	79
PONTIAC	6000	11974	87	91	79
TOYOTA	CRESSIDA	5127	91	90	81
BUICK	SKYHAWK	2095	83	98	81
FORD	TEMPO	12387	98	83	81
BUICK	CENTURY	20537	83	101	84
PLYMOUTH	RELIANT	4369	84	103	86
VOLVO	240	4580	75	118	89
CHRYSLER	LEBARON	4152	81	111	90
PONTIAC	GRAND AM	9333	94	96	90
MERCURY	TOPAZ	2753	100	90	90
BUICK	SKYLARK	4907	100	90	90
CHRYSLER	NEW YORKER	4738	87	105	92
CADILLAC	CIMARRON	2213	88	104	92
HONDA	ACCORD	31237	101	91	92
CHEVROLET	CAVALIER	14192	109	87	95
CHRYSLER	LEBARON GTS	6218	101	95	95
DODGE	LANCER	3781	92	103	95
PONTIAC	SUNBIRD	3448	112	87	98
OLDSMOBILE	CALAIS	5751	112	90	101
NISSAN	MAXIMA	15058	101	123	124
MITSUBISHI	GALANT	2802	126	103	129
AUDI	4000	1779	126	121	153

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
STATION WAGONS/PASSENGER VANS		**40793**	**77**	**90**	**70**
FORD	LTD	1541	61	76	46
FORD	TAURUS	3080	71	80	57
CHEVROLET	CELEBRITY	6437	67	88	59
PONTIAC	6000	1182	66	90	60
DODGE	COLT VISTA	1691	79	87	69
MERCURY	SABLE	1186	84	84	71
PLYMOUTH	RELIANT	2366	70	101	71
CHEVROLET	CAVALIER	5782	92	78	72
OLDSMOBILE	CUTLASS CIERA	3056	82	96	78
NISSAN	MAXIMA	1328	90	87	78
DODGE	ARIES	2087	80	101	81
PLYMOUTH	COLT VISTA	1541	82	100	82
VOLVO	240	2686	82	101	82
BUICK	CENTURY	2203	71	117	83
SPORTS & SPECIALTY		**84865**	**122**	**125**	**153**
TOYOTA	SUPRA	1132	100	71	71
CHRYSLER	LEBARON CONV.	1538	88	98	86
LINCOLN	CONTINENTAL	1643	81	108	87
VOLVO	740/760 SW	1441	86	116	99
LINCOLN	MARK VII	1697	82	121	99
VOLVO	740/760	3953	102	114	116
FORD	MUSTANG CONV.	1802	105	126	132
MERCURY	CAPRI	1188	117	116	136
BMW	325e 4D	2142	87	162	141
AUDI	5000	5028	110	129	142
FORD	MUSTANG	18969	121	118	143
MERCEDES	190D/E/16V	2196	103	148	152
CHEVROLET	CAMARO	18908	141	125	175
BMW	325e 2D	2740	101	175	177
TOYOTA	CELICA SUPRA	1136	119	148	177
PONTIAC	FIREBIRD	11076	154	121	187
BMW	500 SERIES	1700	90	255	228

(See notes on page 27.)

TABLE 4 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS			
TWO-DOOR MODELS		**6149**	**76**	**83**	**63**
OLDSMOBILE	DELTA 88	1798	93	78	72
BUICK	LESABRE	1179	73	107	78
FOUR-DOOR MODELS		**78269**	**73**	**87**	**63**
FORD	CROWN VICTORIA	6051	64	81	52
MERCURY	GRAND MARQUIS	8264	63	86	54
DODGE	DIPLOMAT	1442	57	94	54
PONTIAC	PARISIENNE	6242	70	82	57
CHEVROLET	CAPRICE	13410	77	78	59
CHRYSLER	NEW YORKER 5TH AVE	7157	63	100	63
BUICK	LESABRE	4192	76	91	69
BUICK	ELECTRA	9740	78	90	70
OLDSMOBILE	DELTA 88	11175	82	86	71
OLDSMOBILE	NINETY EIGHT	9815	81	91	73
STATION WAGONS/PASSENGER VANS		**64819**	**75**	**75**	**56**
CHEVROLET	ASTRO VAN	9629	92	47	44
GMC	SAFARI VAN	2020	78	58	46
PONTIAC	PARISIENNE	1134	60	79	47
DODGE	CARAVAN	15630	69	70	48
PLYMOUTH	VOYAGER	15443	70	80	56
CHEVROLET	CAPRICE	3146	87	70	61
FORD	AEROSTAR	12629	72	88	63
OLDSMOBILE	CUSTOM CRUISER	1772	84	77	64
FORD	CROWN VICTORIA	1274	67	99	67
SPORTS & SPECIALTY		**34276**	**85**	**115**	**98**
MERCEDES	300E	2496	80	109	87
CADILLAC	BROUGHAM	2735	82	109	90
LINCOLN	TOWN CAR	8386	94	99	92
CADILLAC	DEVILLE 4D	12285	83	112	93
CADILLAC	DEVILLE 2D	3787	84	112	94
MERCEDES	420/560SEL/300SDL	1940	77	146	112
JAGUAR	XJ6	2016	77	151	116

(See notes on page 27.)

TABLE 5
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	ALL	4519880	100 =	100 =	100 =
			10.5	$ 1666	$ 176
		SMALL CARS			
TWO-DOOR MODELS		603966	122	103	126
TOYOTA	TERCEL	19587	102	85	86
MERCURY	LYNX	5718	109	86	94
FORD	ESCORT	34688	106	89	95
CHEVROLET	CHEVETTE	18842	111	87	96
SUBARU	HATCHBACK	5161	105	93	98
CHEVROLET	SPECTRUM	8731	105	94	98
MAZDA	GLC	10932	109	91	99
HONDA	CIVIC	30737	118	86	101
HONDA	ACCORD	37306	104	102	106
CHEVROLET	SPRINT	11855	109	98	107
DODGE	COLT	8900	119	92	110
VOLKSWAGEN	JETTA	6620	116	98	113
VOLKSWAGEN	GOLF	12023	118	96	114
RENAULT	ALLIANCE	13565	122	94	115
HONDA	PRELUDE	36966	116	100	116
RENAULT	ENCORE	15757	120	98	118
NISSAN	SENTRA	47858	125	96	120
SUBARU	HATCHBACK 4WD	1673	122	98	120
PLYMOUTH	COLT	7707	120	100	120
PONTIAC	1000	3024	111	109	120
PLYMOUTH	TURISMO	26223	128	101	130
TOYOTA	CELICA	35732	120	109	131
MAZDA	626	12797	133	102	135
ISUZU	I-MARK	1083	122	111	136
NISSAN	PULSAR	24666	123	115	141
DODGE	CHARGER	26880	128	111	142
CHRYSLER	LASER	24132	133	110	146
SUBARU	XT COUPE	3609	182	81	146
MITSUBISHI	MIRAGE	5161	140	105	147
TOYOTA	COROLLA	22511	137	110	151
SAAB	900	10422	114	136	155
DODGE	DAYTONA	21796	144	111	159

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
ISUZU	IMPULSE	5814	149	111	164
NISSAN	200SX	22997	146	119	175
VOLKSWAGEN	GTI	5799	170	103	176
MITSUBISHI	CORDIA	4462	163	111	181
PLYMOUTH	CONQUEST	1094	164	133	218
VOLKSWAGEN	SCIROCCO	5461	173	139	241
MITSUBISHI	STARION	3110	152	163	246
DODGE	CONQUEST	1041	156	184	287
FOUR-DOOR MODELS		**545215**	**106**	**94**	**100**
MERCURY	LYNX	2444	80	85	67
TOYOTA	TERCEL	8629	92	89	82
TOYOTA	COROLLA	60891	98	90	88
FORD	ESCORT	15729	99	88	88
PLYMOUTH	HORIZON	42097	99	90	89
HONDA	ACCORD	102599	95	95	91
DODGE	OMNI	34155	102	90	92
CHEVROLET	CHEVETTE	15544	108	87	94
VOLKSWAGEN	GOLF	10954	107	91	97
RENAULT	ALLIANCE	14167	108	93	100
CHEVROLET	NOVA	6726	116	87	102
CHEVROLET	SPECTRUM	9341	110	93	102
HONDA	CIVIC	27738	115	90	104
NISSAN	STANZA	23640	100	106	107
MAZDA	626	33709	114	95	108
VOLKSWAGEN	JETTA	26897	118	94	110
MAZDA	GLC	16048	113	97	110
NISSAN	SENTRA	29173	119	94	112
ISUZU	I-MARK	3958	114	98	112
PONTIAC	1000	1840	123	94	115
RENAULT	ENCORE	5593	111	104	116
SUBARU	DL/GL	20106	126	92	116
SAAB	900	8604	111	111	123
PLYMOUTH	COLT	6722	123	103	127
DODGE	COLT	8121	123	107	131
MITSUBISHI	TREDIA	5200	134	106	142
SUBARU	GL 4WD	4587	140	104	145

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
STATION WAGONS/PASSENGER VANS		**127131**	**96**	**85**	**82**
TOYOTA	TERCEL	8399	79	80	64
FORD	ESCORT	11830	80	80	64
TOYOTA	TERCEL 4WD	10472	81	89	72
VOLKSWAGEN	VANAGON	5224	116	62	73
TOYOTA	VAN	17905	111	69	77
HONDA	CIVIC	13936	84	92	77
HONDA	CIVIC 4WD	3562	88	90	79
SUBARU	DL/GL	17448	98	88	86
MERCURY	LYNX	1677	84	106	89
NISSAN	SENTRA	14220	98	97	95
SUBARU	DL/GL 4WD	21492	109	88	96
SPORTS & SPECIALTY		**199119**	**129**	**126**	**163**
RENAULT	ALLIANCE CONV.	2325	122	87	106
MERCEDES	380SL COUPE	4323	60	200	121
FORD	EXP	13903	135	93	126
HONDA	CIVIC CRX	31456	127	105	134
VOLKSWAGEN	CABRIOLET	4971	119	121	145
PONTIAC	FIERO	31414	145	103	150
MAZDA	RX-7	33343	147	103	151
ALFA ROMEO	SPIDER VELOCE	1027	130	122	159
NISSAN	300ZX 2+2	9430	112	159	179
PORSCHE	911 COUPE	1963	79	234	184
TOYOTA	MR2	9976	152	122	186
CHEVROLET	CORVETTE	17467	87	223	194
AUDI	4000 QUATTRO	1577	146	141	206
NISSAN	300ZX	26764	122	174	211
PORSCHE	944 COUPE	7172	134	173	231
		MIDSIZE CARS			
TWO-DOOR MODELS		**612877**	**105**	**97**	**102**
PONTIAC	6000	3143	80	81	64
CHEVROLET	CELEBRITY	12776	90	88	79

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
CHEVROLET	CITATION	2324	85	96	82
OLDSMOBILE	CUTLASS CIERA	15122	85	98	83
OLDSMOBILE	CUTLASS	72171	84	102	86
PLYMOUTH	RELIANT	10665	96	92	88
FORD	TEMPO	27846	112	81	92
BUICK	REGAL	46320	101	91	92
DODGE	ARIES	8947	94	99	92
DODGE	600	5387	98	96	95
PONTIAC	GRAND PRIX	22575	96	99	95
CHRYSLER	LEBARON	12064	99	100	99
BUICK	SOMERSET	37014	111	92	102
BUICK	CENTURY	5077	101	103	104
CHEVROLET	MONTE CARLO	43389	96	108	104
PONTIAC	GRAND AM	35100	106	99	105
OLDSMOBILE	CALAIS	46092	113	93	106
PONTIAC	SUNBIRD	19597	120	93	111
MERCURY	TOPAZ	6088	121	92	112
BUICK	SKYHAWK	20754	116	98	113
FORD	THUNDERBIRD	56356	104	109	114
CHEVROLET	CAVALIER	54560	137	87	120
MERCURY	COUGAR	45898	108	111	120
OLDSMOBILE	FIRENZA	2421	127	95	120
AUDI	GT COUPE	1192	184	143	263
FOUR-DOOR MODELS		**981165**	**91**	**93**	**85**
PONTIAC	BONNEVILLE	18012	72	89	65
CHEVROLET	CITATION	11728	79	85	66
OLDSMOBILE	CUTLASS	24485	75	89	66
TOYOTA	CAMRY	62346	81	89	72
CHEVROLET	CELEBRITY	75293	81	91	74
DODGE	ARIES	21295	84	90	75
FORD	LTD	47310	78	98	76
BUICK	SKYLARK	30285	88	87	76

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
MERCURY	MARQUIS	35388	82	94	77
OLDSMOBILE	CUTLASS CIERA	90510	81	97	78
DODGE	600	11794	83	94	79
PLYMOUTH	CARAVELLE	14434	85	94	80
CHRYSLER	LEBARON	19716	90	92	83
PLYMOUTH	RELIANT	23947	87	96	83
PONTIAC	6000	43766	91	91	84
MERCURY	TOPAZ	21662	99	84	84
FORD	TEMPO	83127	100	84	84
OLDSMOBILE	FIRENZA	10299	100	84	84
BUICK	CENTURY	78682	90	94	85
CADILLAC	CIMARRON	8051	94	94	88
BUICK	SKYHAWK	8126	105	84	88
CHEVROLET	CAVALIER	60917	113	80	90
TOYOTA	CRESSIDA	19315	92	98	90
CHRYSLER	LEBARON GTS	23501	97	96	92
CHRYSLER	NEW YORKER	26435	89	106	94
VOLVO	240	17049	98	98	96
DODGE	LANCER	16510	98	100	98
PONTIAC	SUNBIRD	14964	108	94	102
NISSAN	MAXIMA	38958	104	115	120
MITSUBISHI	GALANT	4855	121	108	131
VOLKSWAGEN	QUANTUM	3833	125	116	145
AUDI	4000	6974	136	117	159
PEUGEOT	505	6612	134	124	166
STATION WAGONS/PASSENGER VANS		**173485**	**83**	**91**	**76**
AMERICAN	EAGLE	4407	68	94	64
OLDSMOBILE	CUTLASS CIERA	15057	79	81	64
CHEVROLET	CELEBRITY	30867	75	86	65
BUICK	SKYHAWK	1711	77	83	65
OLDSMOBILE	FIRENZA	3049	80	83	67
DODGE	ARIES	10182	75	89	67
PLYMOUTH	RELIANT	10714	78	88	69
PONTIAC	6000	6059	86	83	71
MERCURY	MARQUIS	3497	65	113	73
FORD	LTD	13216	76	99	75

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
TOYOTA	CRESSIDA	1356	78	98	76
CHEVROLET	CAVALIER	25955	101	76	76
BUICK	CENTURY	11271	81	99	80
PONTIAC	SUNBIRD	2542	99	83	82
VOLVO	240	11357	82	102	84
PLYMOUTH	COLT VISTA	4366	87	105	91
CHRYSLER	LEBARON	3018	73	134	97
DODGE	COLT VISTA	5023	92	107	98
VOLKSWAGEN	QUANTUM	1693	106	107	113
NISSAN	MAXIMA	7760	94	127	119
SPORTS & SPECIALTY		**309930**	**124**	**123**	**152**
CHRYSLER	LEBARON CONV.	6777	97	100	97
VOLVO	740/760 SW	1947	99	102	100
DODGE	600 CONV.	5208	105	101	106
VOLVO	740/760	17152	97	114	110
LINCOLN	CONTINENTAL	7681	93	119	111
LINCOLN	MARK VII	5504	96	121	116
CHEVROLET	CAVALIER CONV.	1410	118	108	128
FORD	MUSTANG	60418	113	120	135
MERCURY	CAPRI	6434	108	126	137
MERCEDES	190D/E	12470	118	117	137
FORD	MUSTANG CONV.	6261	106	133	141
BMW	318i/325e 4D	8788	116	126	146
CHEVROLET	CAMARO	67880	140	113	157
AUDI	5000 SW	1104	107	148	157
AUDI	5000	20857	112	147	165
TOYOTA	CELICA SUPRA	12607	134	129	173
BMW	318i/325e 2D	15057	130	141	184
PONTIAC	FIREBIRD	37500	156	121	189
MERKUR	XR4Ti	3480	123	155	190
BMW	500 SERIES	7184	102	187	190
JAGUAR	XJS	1432	114	180	205
BMW	635CSi	1071	93	275	257

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS			
TWO-DOOR MODELS		**63161**	**76**	**87**	**66**
MERCURY	GRAND MARQUIS	4791	69	78	54
OLDSMOBILE	DELTA 88	21856	74	84	62
BUICK	LESABRE	13123	77	86	66
CHEVROLET	CAPRICE	6808	75	93	69
FORD	CROWN VICTORIA	6279	66	106	70
OLDSMOBILE	NINETY EIGHT	7653	88	82	72
BUICK	ELECTRA	2650	82	95	78
FOUR-DOOR MODELS		**479612**	**72**	**89**	**65**
FORD	CROWN VICTORIA	48811	60	88	53
MERCURY	GRAND MARQUIS	54054	63	88	55
OLDSMOBILE	DELTA 88	64796	68	82	56
CHEVROLET	IMPALA	9643	74	79	58
BUICK	LESABRE	45708	68	88	59
PONTIAC	PARISIENNE	22885	72	82	60
CHEVROLET	CAPRICE	48407	74	81	60
PLYMOUTH	GRAN FURY	5100	69	94	65
DODGE	DIPLOMAT	10583	70	95	66
OLDSMOBILE	NINETY EIGHT	67884	85	89	76
CHRYSLER	NEW YORKER 5TH AVE	47870	74	104	76
BUICK	ELECTRA	53868	86	95	81
STATION WAGONS/PASSENGER VANS		**173295**	**78**	**78**	**60**
GMC	SAFARI VAN	3194	84	57	48
CHEVROLET	ASTRO VAN	12358	90	59	53
PLYMOUTH	VOYAGER	52529	76	77	58
OLDSMOBILE	CUSTOM CRUISER	7853	79	74	58
DODGE	CARAVAN	53386	76	78	59
PONTIAC	PARISIENNE	6217	76	80	61
CHEVROLET	CAPRICE	17717	76	82	63
BUICK	LESABRE	1969	92	71	65
FORD	CROWN VICTORIA	9484	78	90	70
MERCURY	GRAND MARQUIS	4650	78	99	77
BUICK	ELECTRA	2430	91	100	91

(See notes on page 27.)

TABLE 5 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS (CONTD)			
PEUGEOT	505	1507	87	111	96
SPORTS & SPECIALTY		**250924**	**85**	**112**	**94**
CADILLAC	BROUGHAM 2D	3059	84	91	76
BUICK	RIVIERA	22297	82	97	79
OLDSMOBILE	TORONADO	14918	76	109	82
MERCEDES	300TD	1193	90	91	82
CADILLAC	DEVILLE 4D	65737	84	101	85
MERCEDES	300SD/380SE	7680	77	123	94
LINCOLN	TOWN CAR	33812	90	105	94
CADILLAC	DEVILLE 2D	21225	87	111	97
CADILLAC	BROUGHAM 4D	16657	88	116	101
CADILLAC	ELDORADO	28247	82	124	102
CADILLAC	SEVILLE	13327	80	134	107
MERCEDES	500SEL	2646	86	125	107
MERCEDES	300D	9087	89	124	110
BMW	735i	2725	115	121	139
JAGUAR	XJ6	6602	89	160	143

(See notes on page 27.)

TABLE 6
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	ALL	8518493	100 = 10.1	100 = $ 1573	100 = $ 158
		SMALL CARS			
TWO-DOOR MODELS		1255888	116	103	120
TOYOTA	TERCEL	34529	100	88	89
MERCURY	LYNX	25659	97	92	89
FORD	ESCORT	144520	100	93	93
CHEVROLET	CHEVETTE	84990	104	90	94
PONTIAC	1000	15309	103	95	97
SUBARU	HATCHBACK	12816	107	93	99
HONDA	CIVIC	53717	110	91	100
MAZDA	GLC	16936	113	92	104
RENAULT	ENCORE	40571	113	94	106
RENAULT	ALLIANCE	39659	114	95	109
NISSAN	SENTRA	87547	118	95	111
DODGE	COLT	20416	114	98	112
PLYMOUTH	COLT	15726	117	98	115
HONDA	ACCORD	69556	112	104	117
SUBARU	HATCHBACK 4WD	3709	110	110	120
VOLKSWAGEN	JETTA	5268	101	120	121
PLYMOUTH	TURISMO	43262	124	99	122
VOLKSWAGEN	RABBIT	41069	114	109	124
DODGE	CHARGER	44500	121	106	128
TOYOTA	COROLLA	35055	121	107	129
TOYOTA	CELICA	83175	119	109	130
NISSAN	PULSAR	32848	117	113	132
SUBARU	HARDTOP	15975	129	104	134
MAZDA	626	17616	130	104	135
NISSAN	STANZA	2483	118	117	139
HONDA	PRELUDE	52863	127	110	139
ISUZU	IMPULSE	16179	132	106	141
SAAB	900	14842	111	128	142
CHRYSLER	LASER	50321	130	111	144
DODGE	DAYTONA	39416	139	115	160
DATSUN	200SX	51167	139	122	170
MITSUBISHI	CORDIA	11585	157	111	174

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
SUBARU	HARDTOP 4WD	1582	129	137	177
RENAULT	FUEGO	5080	151	118	177
VOLKSWAGEN	SCIROCCO	14264	140	134	187
DODGE	CONQUEST	3299	146	152	222
MITSUBISHI	STARION	4698	179	139	248
PLYMOUTH	CONQUEST	2804	169	156	264
FOUR-DOOR MODELS		**982247**	**104**	**95**	**99**
VOLKSWAGEN	RABBIT	27313	91	92	84
TOYOTA	TERCEL	19760	96	90	86
PLYMOUTH	HORIZON	65660	99	88	86
FORD	ESCORT	70962	93	93	87
MERCURY	LYNX	12828	97	91	89
ISUZU	I-MARK	4512	98	92	90
CHEVROLET	CHEVETTE	77541	102	90	92
DODGE	OMNI	54136	98	94	92
TOYOTA	COROLLA	109746	102	91	93
PONTIAC	1000	11336	103	91	93
HONDA	CIVIC	32893	109	91	99
RENAULT	ENCORE	18088	98	101	99
HONDA	ACCORD	176968	109	95	103
NISSAN	SENTRA	43814	112	94	105
VOLKSWAGEN	JETTA	27353	94	114	106
RENAULT	ALLIANCE	41967	108	100	108
PLYMOUTH	COLT	7329	113	96	108
NISSAN	STANZA	40445	98	111	108
MAZDA	626	51058	111	98	109
MAZDA	GLC	23388	118	94	110
DODGE	COLT	9284	115	99	113
SUBARU	DL/GL	28871	116	98	114
SUBARU	GL 4WD	3312	123	94	116
SAAB	900	12884	113	123	138
MITSUBISHI	TREDIA	10768	133	111	149
STATION WAGONS/PASSENGER VANS		**297052**	**94**	**90**	**85**
FORD	ESCORT	65649	79	89	70
VOLKSWAGEN	VANAGON	14139	110	64	71

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONTD)			
MERCURY	LYNX	10502	82	90	74
TOYOTA	TERCEL 4WD	28153	81	94	76
TOYOTA	VAN	33619	110	72	79
HONDA	CIVIC	23341	88	94	83
TOYOTA	TERCEL	19210	86	98	85
NISSAN	SENTRA	35447	102	89	91
SUBARU	DL/GL	27922	98	99	97
SUBARU	DL/GL 4WD	36958	112	102	114
RENAULT	SPORTWAGON	1939	125	106	133
SPORTS & SPECIALTY		**356821**	**121**	**129**	**156**
VOLKSWAGEN	RABBIT CONV.	9770	104	103	107
FORD	EXP	18810	119	103	122
PONTIAC	FIERO	108561	129	98	125
HONDA	CIVIC CRX	40738	121	105	127
MERCEDES	380SL COUPE	5679	71	212	150
MAZDA	RX-7	38056	142	109	156
CHEVROLET	CORVETTE	43880	82	192	158
PORSCHE	911 COUPE	4103	79	217	171
NISSAN	300ZX 2+2	19184	120	163	196
ALFA ROMEO	SPIDER VELOCE	1902	150	135	202
NISSAN	300ZX	45516	125	192	239
AUDI	4000 QUATTRO	3159	177	136	241
PORSCHE	944 COUPE	14224	132	188	248
PORSCHE	928 COUPE	1721	124	256	316
		MIDSIZE CARS			
TWO-DOOR MODELS		**1274216**	**103**	**96**	**98**
CHRYSLER	LEBARON	22268	90	91	82
DODGE	ARIES	12499	91	90	82
OLDSMOBILE	OMEGA	8111	99	84	83

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
PONTIAC	6000	6681	97	90	87
OLDSMOBILE	CUTLASS	207505	87	101	87
PLYMOUTH	RELIANT	15575	92	95	87
BUICK	SKYLARK	16667	99	88	88
DODGE	600	10587	94	94	88
OLDSMOBILE	CUTLASS CIERA	29888	90	98	88
FORD	TEMPO	81114	105	84	89
PONTIAC	GRAND PRIX	63181	93	95	89
CHEVROLET	CELEBRITY	23514	96	93	89
CHEVROLET	CITATION	8837	93	99	92
BUICK	REGAL	131777	102	91	93
MERCURY	TOPAZ	21561	105	90	94
PONTIAC	PHOENIX	5058	100	94	94
OLDSMOBILE	FIRENZA	13177	109	87	95
CHEVROLET	MONTE CARLO	108758	94	105	99
BUICK	SKYHAWK	71249	115	88	102
BUICK	CENTURY	11902	99	104	102
CHEVROLET	CAVALIER	117816	131	80	105
PONTIAC	SUNBIRD	56392	116	92	106
FORD	THUNDERBIRD	124956	105	112	117
MERCURY	COUGAR	96527	111	108	119
VOLVO	240	4762	122	122	149
AUDI	GT COUPE	2644	146	120	176
AUDI	4000	1209	137	150	206
FOUR-DOOR MODELS		**1889748**	**92**	**93**	**86**
AMERICAN	EAGLE	2581	61	104	63
OLDSMOBILE	CUTLASS	72319	75	88	66
PONTIAC	BONNEVILLE	55892	76	91	69
CHEVROLET	CITATION	29573	80	87	70
BUICK	REGAL	38998	86	89	76
OLDSMOBILE	OMEGA	25547	88	88	77

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
CHRYSLER	E CLASS	23754	84	92	77
FORD	LTD	83972	79	98	78
FORD	TEMPO	195639	95	82	78
MERCURY	MARQUIS	67142	82	97	80
TOYOTA	CAMRY	85124	84	95	80
CHEVROLET	CELEBRITY	115205	86	93	80
MERCURY	TOPAZ	56096	95	84	80
PLYMOUTH	RELIANT	54531	88	91	80
DODGE	ARIES	41943	87	93	81
BUICK	SKYLARK	60384	91	90	81
OLDSMOBILE	FIRENZA	31868	98	84	82
CHRYSLER	LEBARON	38258	91	92	83
OLDSMOBILE	CUTLASS CIERA	139578	86	97	84
DODGE	600	26298	85	99	84
BUICK	SKYHAWK	31654	97	87	84
PONTIAC	6000	62950	94	91	86
CHRYSLER	NEW YORKER	51076	87	103	89
CHEVROLET	CAVALIER	139700	114	80	91
PONTIAC	PHOENIX	4471	94	98	91
BUICK	CENTURY	122235	93	99	92
PONTIAC	SUNBIRD	46269	104	91	95
VOLVO	240	51588	97	108	105
CADILLAC	CIMARRON	16833	103	107	111
TOYOTA	CRESSIDA	29682	105	113	119
NISSAN	MAXIMA	62471	108	111	121
PEUGEOT	505	11785	115	119	136
AUDI	4000	13347	145	118	172
STATION WAGONS/PASSENGER VANS		**406773**	**87**	**91**	**80**
AMERICAN	EAGLE	13603	74	95	70
CHEVROLET	CELEBRITY	50992	79	89	70
MERCURY	MARQUIS	9376	72	100	72
PLYMOUTH	RELIANT	25236	84	89	75
BUICK	SKYHAWK	10166	89	84	75
FORD	LTD	32574	76	101	76
DODGE	ARIES	21929	84	91	76
OLDSMOBILE	FIRENZA	13702	90	85	77

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONTD)			
CHEVROLET	CAVALIER	82661	98	79	77
CHRYSLER	LEBARON	9148	71	111	79
PONTIAC	SUNBIRD	11316	91	87	79
OLDSMOBILE	CUTLASS CIERA	25759	83	97	80
DODGE	COLT VISTA	7488	84	98	82
PONTIAC	6000	12606	86	99	85
BUICK	CENTURY	18583	88	101	89
PLYMOUTH	COLT VISTA	6151	87	102	89
VOLVO	240	28747	90	100	90
NISSAN	MAXIMA	10504	91	101	92
TOYOTA	CRESSIDA	3696	95	113	107
VOLKSWAGEN	QUANTUM	12537	115	100	115
SPORTS & SPECIALTY		**623315**	**126**	**121**	**152**
CHRYSLER	LEBARON CONV.	12727	93	106	99
DODGE	600 CONV.	8735	93	107	100
CHEVROLET	CAVALIER CONV.	2767	115	93	107
LINCOLN	CONTINENTAL	16341	96	121	116
PONTIAC	SUNBIRD CONV.	3480	116	106	123
LINCOLN	MARK VII	18345	98	127	124
FORD	MUSTANG CONV.	11888	104	125	130
FORD	MUSTANG	83839	111	125	139
AUDI	5000 SW	3158	116	125	145
VOLVO	740/760	10020	117	124	145
MERCURY	CAPRI	12077	114	128	146
CHEVROLET	CAMARO	187824	136	109	148
MERCEDES	300CD	1318	92	166	152
TOYOTA	CELICA SUPRA	24811	121	127	153
MERCEDES	190D/E	16752	120	129	154
AUDI	5000	43185	117	135	158
PONTIAC	FIREBIRD	95200	149	112	167
BMW	528e/533i	11215	109	156	170
BMW	318i/325e	56225	134	151	201
BMW	633CSi	1692	107	197	210
JAGUAR	XJS	1614	99	242	240

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS			
TWO-DOOR MODELS		**135982**	**77**	**88**	**68**
OLDSMOBILE	NINETY EIGHT	7253	65	77	50
FORD	CROWN VICTORIA	10451	63	89	57
MERCURY	GRAND MARQUIS	11550	66	99	65
CHEVROLET	CAPRICE	15966	82	82	68
OLDSMOBILE	DELTA 88	58911	78	87	68
BUICK	LESABRE	28376	80	91	73
BUICK	ELECTRA	3475	98	87	85
FOUR-DOOR MODELS		**701151**	**73**	**86**	**63**
MERCURY	GRAND MARQUIS	87654	67	85	56
FORD	CROWN VICTORIA	73933	63	92	58
OLDSMOBILE	DELTA 88	142663	73	81	59
CHEVROLET	CAPRICE	96785	76	79	60
PONTIAC	PARISIENNE	32801	77	82	63
CHEVROLET	IMPALA	18946	79	81	64
OLDSMOBILE	NINETY EIGHT	47822	72	89	64
BUICK	LESABRE	92445	76	87	66
DODGE	DIPLOMAT	8575	68	102	70
PLYMOUTH	GRAN FURY	5050	78	93	72
BUICK	ELECTRA	32433	83	89	75
CHRYSLER	NEW YORKER 5TH AVE	62032	75	106	80
STATION WAGONS/PASSENGER VANS		**220401**	**82**	**84**	**68**
PONTIAC	PARISIENNE	11346	77	81	62
PLYMOUTH	VOYAGER	48106	83	75	62
CHEVROLET	CAPRICE	43359	78	82	64
DODGE	CARAVAN	51115	83	83	69
FORD	CROWN VICTORIA	17377	78	94	73
MERCURY	GRAND MARQUIS	10955	79	94	74
OLDSMOBILE	CUSTOM CRUISER	23955	86	87	75
BUICK	ELECTRA	10675	97	89	86
PEUGEOT	505	3513	88	114	100

(See notes on page 27.)

TABLE 6 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS (CONTD)			
SPORTS & SPECIALTY		**374898**	**87**	**114**	**98**
CADILLAC	DEVILLE 4D	47845	82	102	84
OLDSMOBILE	TORONADO	33535	83	102	84
BUICK	RIVIERA	41991	84	102	86
LINCOLN	TOWN CAR	52654	85	101	86
CADILLAC	BROUGHAM 4D	24960	86	101	87
CADILLAC	DEVILLE 2D	40808	90	100	90
CADILLAC	BROUGHAM 2D	3709	82	110	90
CADILLAC	ELDORADO	53366	86	119	103
MERCEDES	300TD	1626	87	126	109
CADILLAC	ELDORADO CONV.	1695	76	158	120
CADILLAC	SEVILLE	25630	91	135	123
MERCEDES	300SD/380SE	14455	96	143	137
MERCEDES	300D	15318	93	148	137
MERCEDES	500SEL	1730	86	162	139
JAGUAR	XJ6	8077	105	171	180
BMW	733i	5508	114	219	250

Notes for Tables 4, 5, and 6:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
< $150	5%	50%
≥ $150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year. Series with less than 1,000 insured vehicle years of exposure are not summarized.

Vans, Pickups, and Utility Vehicles

This section presents the results for 1984, 1985, and 1986 model year vans, pickups, and utility vehicles insured under noncommercial collision coverages. The results for the 1986 models are based on a total exposure of over 330,000 insured vehicle years, those for 1985 models on approximately 1.3 million insured vehicle years, and those for 1984 models on over 2.1 million insured vehicle years. Results for individual vehicle series with less than 1,000 insured vehicles years of exposure are not given.

The results for the pickups are given separately for small and standard pickups. Small pickups are defined as those with curb weight of less than 3,200 pounds. The results for utility vehicles are given separately for three size classes: small utility vehicles with wheelbases less than 100 inches, intermediate utility vehicles with wheelbases in the range of 100-120 inches, and large utility vehicles with wheelbases exceeding 120 inches.

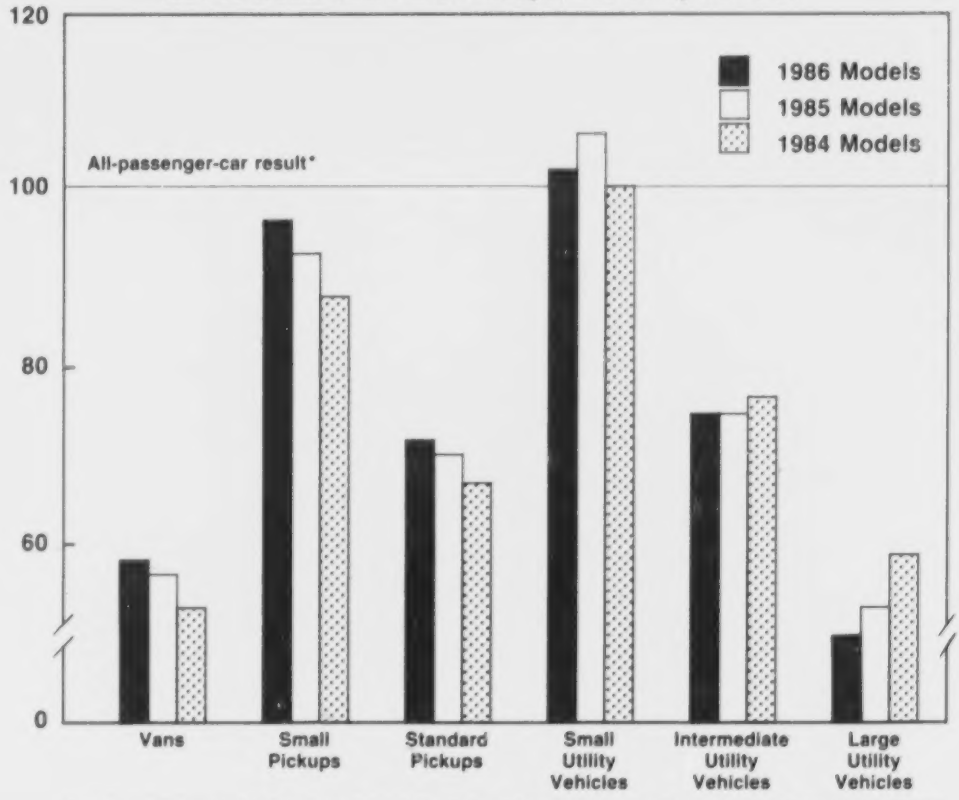
Figure 1 presents relative average loss payments per insured vehicle year for 1984, 1985, and 1986 model year vans, pickups, and utility vehicles. These results are presented in relative terms with the value 100 corresponding to the result for *all passenger cars* combined for each model year. Thus, the value 59 for the 1986 model year vans indicates an average loss payment per insured vehicle year that was 59 percent of the $191 for all 1986 passenger cars.

Vans and large utility vehicles had the lowest average loss payments per insured vehicle year, and small pickups and small utility vehicles had the highest. The loss results of small utility vehicles equalled or exceeded the all-passenger-car results for each model year. For the 1984-86 model years, the Ford Bronco II and Jeep CJ-7 accounted for nearly all of the small utility vehicle exposure.

Tables 7, 8, and 9 present detailed collision coverage results for all 1984, 1985, and 1986 model year vans, pickups, and utility vehicles with at least 1,000 insured vehicle years of exposure. The values displayed are total exposure in insured vehicle years and relative values for claim frequency, average loss payment per claim, and average loss payment per insured vehicle year. The relative numbers are based on the value 100, which corresponds to the result for *all passenger cars* combined in each loss category for each model year.

Relationships between vehicle size and collision losses are apparent from several of these results. For pickup trucks and utility vehicles, the smaller vehicles displayed higher average loss payments per insured vehicle year than larger vehicles. For each of the three model years, small, intermediate, and large utility vehicles had similar claim frequencies, but the average loss payments per claim decreased as vehicle size increased. The results for small and standard pickups also show an inverse size relationship; however, these vehicles had similar average loss payments per claim, but the small pickups had significantly higher claim frequencies.

FIGURE 1
Collision Coverages — Relative Average Loss Payment Per Insured Vehicle Year
1984-86 Model Year Vans, Pickups, and Utility Vehicles



*All-passenger-car results = $191 for 1986, $176 for 1985, $158 for 1984.

1986 Models During Their First Year Table 7 (page 30) presents detailed collision coverage results for 1986 model year vans, pickups, and utility vehicles during their first year.

The Ford E-150 Club Wagon had by far the lowest relative average loss payment per insured vehicle year; it was only about one-fifth the result for all 1986 passenger cars. The Toyota 4Runner standard pickup had the highest average loss payment per insured vehicle year. The Mitsubishi Standard Bed pickup had the highest claim frequency result and the Jeep Grand Wagoneer the lowest. The Jeep CJ-7 had the highest average loss payment per claim and the Ford E-150 Club Wagon had the lowest. The results for all three collision loss measures for the Dodge D-50, Toyota Xtra Cab, Toyota Standard Bed — all small pickups — and the Toyota 4Runner standard pickup exceeded the 1986 all-passenger-car average.

1985 Models During Their First Two Years Table 8 (page 32) presents detailed collision coverage results for 1985 model year vans, pickups, and utility vehicles. The results displayed are the combined results for the first two years of the 1985 models.

Similar to the results for the 1986 models, the average loss payment per insured vehicle year was lowest for the Ford E-150 Club Wagon and highest for the Toyota 4Runner pickup. The Subaru Brat pickup had the worst claim frequency result, and the GMC C2500/K2500 pickup had the best result. For average loss payment per claim, the GMC Safari Cargo Van had the lowest value and the Jeep CJ-7 had the highest. All three collision loss results for the Dodge D-50, Toyota Standard Bed, and Toyota 4Runner pickups equalled or exceeded the all-passenger-car results for model year 1985. For the four large utility vehicles and all the domestic vans reported in Table 8, all three collision loss results were less than the all-passenger-car results.

1984 Models During Their First Three Years Table 9 (page 34) presents detailed collision coverage results for 1984 model year vans, pickups, and utility vehicles. The results displayed are the combined results for the first three years of the 1984 models.

Similar to the 1985 and 1986 model results, the Ford E-150 Club Wagon had the lowest relative average loss payment per insured vehicle year and the Toyota 4Runner pickup had the highest. The Subaru Brat pickup had the highest claim frequency; the Jeep Scrambler and Jeep J10/J20 pickup had the lowest claim frequencies. The Jeep CJ-7 had the highest average loss payment per claim and the Volkswagen Vanagon Camper had the lowest.

For the four large utility vehicles and all but two of the vans reported in Table 9, each of the three collision loss results was less than the all-passenger-car results. The three collision loss results for all five of the Toyota pickup trucks and the Subaru Brat exceeded the 1984 passenger car averages.

TABLE 7
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**30956**	**84**	**70**	**59**
FORD	E-150 CLUB WAGON (1/2-3/4T)	1079	63	34	21
FORD	E-150 ECONOLINE (1/2-3/4T)	7506	86	59	51
GMC	G2500 VANDURA (3/4T)	1112	100	54	54
CHEVROLET	G20 CHEVYVAN (3/4T)	4625	88	62	54
DODGE	B150 (1/2T)	1880	72	86	62
DODGE	B250 (3/4T)	3760	68	97	66
CHEVROLET	ASTRO CARGO VAN	2993	102	71	72
FORD	AEROSTAR CARGO VAN	1808	64	120	77
TOYOTA	CARGO VAN	1992	100	81	81
		PICKUPS			
SMALL PICKUPS		**160677**	**101**	**96**	**97**
JEEP	COMANCHE	3946	88	78	68
MAZDA	CAB PLUS	4816	98	75	74
CHEVROLET	S10	10878	81	94	76
GMC	S15	2244	84	96	81
MAZDA	LONG BED	6345	103	79	81
ISUZU	LONG BED	1529	90	93	84
ISUZU	STANDARD BED	6067	89	95	85
FORD	RANGER	27023	91	102	94
MAZDA	STANDARD BED	16882	109	87	95
NISSAN	LONG BED	2347	103	93	96
NISSAN	KING CAB	13682	102	98	99
NISSAN	STANDARD BED	24103	108	94	101
TOYOTA	LONG BED	4153	105	97	102
DODGE	D-50	8719	105	101	105
TOYOTA	XTRA CAB	7135	107	107	114
TOYOTA	STANDARD BED	16402	111	108	119
MITSUBISHI	STANDARD BED	3431	134	95	128

(See notes on page 36.)

TABLE 7 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1986 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		PICKUPS (CONTD)			
STANDARD PICKUPS		**76102**	**73**	**98**	**72**
CHEVROLET	C20/K20 (3/4T)	3477	69	85	59
GMC	C2500/K2500 (3/4T)	1043	69	89	62
FORD	F-250 (3/4T)	9592	68	91	62
FORD	F-150 (1/2-3/4T)	27659	71	97	69
CHEVROLET	C10/K10 (1/2T)	19062	70	100	71
CHEVROLET	EL CAMINO	1339	66	109	72
DODGE	D150/W150 (1/2T)	6125	79	101	80
GMC	C1500/K1500 (1/2T)	4615	79	106	84
TOYOTA	4RUNNER	2077	114	115	131
		UTILITY VEHICLES			
SMALL UTILITY VEHICLES		**18333**	**78**	**132**	**103**
SUZUKI	SAMURAI	2202	77	121	94
FORD	BRONCO II	11876	81	128	104
JEEP	CJ-7	3851	69	156	108
INTERMEDIATE UTILITY VEHICLES		**45152**	**76**	**100**	**75**
JEEP	GRAND WAGONEER	1507	61	108	66
GMC	S15 JIMMY	2265	85	83	70
ISUZU	TROOPER II	6113	82	88	72
CHEVROLET	S10 BLAZER	10578	81	92	74
CHEVROLET	K10 BLAZER (1/2T)	3029	71	106	75
FORD	BRONCO	5299	71	106	75
JEEP	CHEROKEE	13308	70	108	76
JEEP	WAGONEER	1370	70	115	80
LARGE UTILITY VEHICLES		**5577**	**77**	**65**	**50**
CHEVROLET	C10/K10 SUBURBAN (1/2T)	3281	76	53	40
CHEVROLET	C20/K20 SUBURBAN (3/4T)	1008	71	92	65

(See notes on page 36.)

TABLE 8
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**153884**	**83**	**68**	**57**
FORD	E-150 CLUB WAGON (1/2-3/4T)	5635	65	64	42
FORD	E-250 ECONOLINE (3/4T)	2410	71	64	46
GMC	G2500 RALLY WAGON (3/4T)	1229	68	70	48
FORD	E-150 ECONOLINE (1/2-3/4T)	37888	80	63	51
GMC	SAFARI CARGO VAN	3409	89	57	51
DODGE	B150 (1/2T)	9283	70	75	53
CHEVROLET	G20 SPORTVAN (3/4T)	6265	84	64	54
CHEVROLET	G20 CHEVYVAN (3/4T)	26192	81	67	54
DODGE	B250 (3/4T)	18779	78	74	58
GMC	G2500 VANDURA (3/4T)	6820	88	66	59
CHEVROLET	ASTRO CARGO VAN	13872	93	65	61
VOLKSWAGEN	VANAGON CAMPER	1808	109	62	67
CHEVROLET	G10 CHEVYVAN (1/2T)	3954	84	80	68
DODGE	MINI RAM/ROYAL VAN	5875	86	82	70
TOYOTA	CARGO VAN	8441	109	81	89
		PICKUPS			
SMALL PICKUPS		**428546**	**96**	**98**	**93**
ISUZU	STANDARD BED	7439	87	80	70
GMC	S15	16950	82	91	74
ISUZU	LONG BED	5076	82	92	75
CHEVROLET	S10	76143	82	94	77
FORD	RANGER	91294	83	105	88
NISSAN	KING CAB	41464	101	93	94
NISSAN	STANDARD BED	45799	107	93	99
NISSAN	LONG BED	6085	109	91	100
TOYOTA	LONG BED (1/2T)	23541	106	96	102
DODGE	D50	23008	106	100	106
MITSUBISHI	STANDARD BED	9099	123	89	109
TOYOTA	XTRA CAB	35396	111	99	109
TOYOTA	STANDARD BED	45177	110	106	117
SUBARU	BRAT	1493	135	88	119

(See notes on page 36.)

TABLE 8 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1985 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
	PICKUPS (CONTD)				
STANDARD PICKUPS		**358401**	**73**	**96**	**70**
GMC	C2500/K2500 (3/4T)	5564	62	89	55
CHEVROLET	C20/K20 (3/4T)	18335	69	83	57
FORD	F-150 (1/2-3/4T)	117852	70	94	66
CHEVROLET	C10/K10 (1/2T)	91450	72	91	66
FORD	F-250 (3/4T)	37900	72	94	68
GMC	C1500/K1500 (1/2T)	24609	71	97	68
CHEVROLET	EL CAMINO	7048	74	103	77
DODGE	D250/W250 (3/4T)	5057	82	100	82
DODGE	D150/W150 (1/2T)	40498	81	107	87
TOYOTA	4RUNNER	8815	118	113	134
	UTILITY VEHICLES				
SMALL UTILITY VEHICLES		**63127**	**81**	**132**	**107**
MITSUBISHI	MONTERO	1445	79	95	75
JEEP	CJ-7	17379	71	149	105
FORD	BRONCO II	44187	85	128	109
INTERMEDIATE UTILITY VEHICLES		**220737**	**75**	**99**	**75**
GMC	K1500 JIMMY (1/2T)	3259	65	103	67
ISUZU	TROOPER II	5856	93	76	71
JEEP	CHEROKEE	43881	73	98	72
JEEP	WAGONEER	6290	68	107	73
CHEVROLET	S10 BLAZER	87433	78	95	74
GMC	S15 JIMMY	18942	76	98	74
FORD	BRONCO	19825	72	108	78
DODGE	AD150/AW150 (1/2T)	15165	74	108	80
CHEVROLET	K10 BLAZER (1/2T)	13859	72	113	81
TOYOTA	LAND CRUISER	1507	83	113	94
JEEP	GRAND WAGONEER	4720	78	127	99
LARGE UTILITY VEHICLES		**25361**	**73**	**73**	**53**
GMC	C1500/K1500 SUBURBAN (1/2T)	4473	74	62	46
CHEVROLET	C10/K10 SUBURBAN (1/2T)	14674	74	71	53
CHEVROLET	C20/K20 SUBURBAN (3/4T)	4590	69	82	56
GMC	C2500/K2500 SUBURBAN (3/4T)	1622	64	95	61

(See notes on page 36.)

TABLE 9
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		VANS			
ALL VANS		**269454**	**77**	**69**	**53**
FORD	E-150 CLUB WAGON (1/2-3/4T)	10946	67	60	40
GMC	G1500 VANDURA (1/2T)	1391	69	66	46
GMC	G2500 RALLY WAGON (3/4T)	2715	78	60	47
FORD	E-150 ECONOLINE (1/2-3/4T)	67980	74	65	48
CHEVROLET	G20 SPORTVAN (3/4T)	17158	76	66	50
CHEVROLET	G20 CHEVYVAN (3/4T)	58846	79	66	52
GMC	G2500 VANDURA (3/4T)	18245	84	64	54
DODGE	B150 (1/2T)	23273	71	77	54
CHEVROLET	G10 CHEVYVAN (1/2T)	10781	74	74	55
VOLKSWAGEN	VANAGON CAMPER	3772	98	57	56
DODGE	B250 (3/4T)	38124	76	76	58
FORD	E-250 ECONOLINE (3/4T)	2978	84	72	61
CHEVROLET	G10 SPORTVAN (1/2T)	1318	97	75	72
DODGE	MINI RAM/ROYAL VAN	6606	90	82	74
FORD	E-250 CLUB WAGON (3/4T)	1503	73	107	78
TOYOTA	CARGO VAN	3676	113	72	81
		PICKUPS			
SMALL PICKUPS		**768762**	**90**	**98**	**88**
MAZDA	LONG BED	26292	85	79	67
CHEVROLET	S10	120584	77	93	71
GMC	S15	25755	76	95	72
ISUZU	LONG BED	13396	88	82	72
MAZDA	STANDARD BED	82309	91	82	74
JEEP	SCRAMBLER	2259	61	128	77
ISUZU	STANDARD BED	11946	95	84	79
FORD	RANGER	145412	79	107	85
DODGE	RAMPAGE	7697	92	93	85
NISSAN	KING CAB	62385	94	95	89
NISSAN	STANDARD BED	66244	100	93	93
NISSAN	LONG BED	14015	101	95	96
DODGE	D-50	30881	93	103	96

(See notes on page 36.)

TABLE 9 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		PICKUPS (CONTD)			
MITSUBISHI	STANDARD BED	6149	114	88	100
TOYOTA	LONG BED (1/2T)	51445	104	102	106
TOYOTA	LONG BED (3/4T)	4044	104	103	107
TOYOTA	XTRA CAB	45345	106	107	114
TOYOTA	STANDARD BED	49270	112	112	125
SUBARU	BRAT	3317	138	102	140
STANDARD PICKUPS		**583142**	**69**	**97**	**67**
GMC	C2500/K2500 (3/4T)	9810	64	81	52
JEEP	J10/J20 (3/4T)	1121	61	88	54
FORD	F-150 (1/2-3/4T)	202834	65	94	61
CHEVROLET	C20/K20 (3/4T)	31696	64	95	61
GMC	CABALLERO	1518	75	83	62
CHEVROLET	C10/K10 (1/2T)	151681	71	96	68
GMC	C1500/K1500 (1/2T)	41871	71	97	69
FORD	F-250 (3/4T)	56365	69	102	71
DODGE	D250/W250 (3/4T)	8856	78	95	74
CHEVROLET	EL CAMINO	14792	75	101	76
DODGE	D150/W150 (1/2T)	58583	77	103	79
TOYOTA	4RUNNER	3034	135	110	148
		UTILITY VEHICLES			
SMALL UTILITY VEHICLES		**157391**	**76**	**132**	**100**
MITSUBISHI	MONTERO	2159	77	101	78
JEEP	CJ-7	30648	68	143	98
FORD	BRONCO II	124421	78	131	102

(See notes on page 36.)

TABLE 9 (CONTD)
INSURANCE LOSSES, COLLISION COVERAGES
1984 MODELS - VANS, PICKUPS, AND UTILITY VEHICLES

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		UTILITY VEHICLES (CONTD)			
INTERMEDIATE UTILITY VEHICLES		**301938**	**74**	**103**	**77**
GMC	K1500 JIMMY (1/2T)	5240	62	95	58
TOYOTA	LAND CRUISER	3703	77	88	67
GMC	S15 JIMMY	24668	73	97	70
CHEVROLET	K10 BLAZER (1/2T)	26013	68	104	71
CHEVROLET	S10 BLAZER	113279	74	98	73
FORD	BRONCO	32815	70	108	75
ISUZU	TROOPER II	4156	101	77	78
DODGE	AD150/AW150 (1/2T)	20160	76	108	82
JEEP	WAGONEER	14688	77	108	83
JEEP	CHEROKEE	45426	77	112	86
JEEP	GRAND WAGONEER	11792	88	117	103
LARGE UTILITY VEHICLES		**37520**	**76**	**78**	**59**
GMC	C2500/K2500 SUBURBAN (3/4T)	2273	75	71	53
CHEVROLET	C10/K10 SUBURBAN (1/2T)	21553	76	76	58
CHEVROLET	C20/K20 SUBURBAN (3/4T)	7072	74	79	59
GMC	C1500/K1500 SUBURBAN (1/2T)	6621	77	81	62

Notes for Tables 7, 8, and 9:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
$< $150	5%	50%
$\geq $150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year. Series with less than 1,000 insured vehicle years of exposure are not summarized.

Appendix A-1
1984-86 Vehicle Series Designation

Passenger Cars

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Acura	Integra	2Dr, 4Dr			S
	Legend*	4Dr			M
Alfa Romeo*	GTV6	2Dr	S	S	S
	Spider Veloce	2Dr	S	S	S
American	Eagle	4Dr, SW	M	M	M
Aston Martin*	Lagonda	4Dr	L	L	L
	Saloon	2Dr	M	M	M
	Vantage	2Dr	M	M	M
	Volante	Conv	M	M	M
Audi	4000	2Dr[4], 4Dr	M	M	M
	4000 Quattro*	4Dr	S	S	S
	5000*	4Dr, SW	M	M	M
	5000 Quattro*	4Dr, SW			M
	GT Coupe	2Dr	M	M	M
	Quattro*	2Dr	S	S	
Avanti*	Avanti II	2Dr	M	M	M
Bentley*	Corniche	Conv	L	L	L
	Mulsanne	4Dr	L	L	L
	Mulsanne-L	4Dr	L	L	L

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
BMW*	318i	2Dr, 4Dr[2]	M	M	
	325e	2Dr, 4Dr[3]	M	M	M
	524TD	4Dr		M	M
	528e	4Dr	M	M	M
	533i	4Dr	M		
	535i	4Dr		M	M
	633CSi	2Dr	M		
	635CSi	2Dr		M	M
	733i	4Dr	L		
	735i	4Dr		L	L
	L7	4Dr			L
Buick	Century	2Dr, 4Dr, SW	M	M	M
	Electra FWD	2Dr, 4Dr		L	L
	Electra RWD	2Dr[4], 4Dr[4], SW	L	L	L
	LeSabre	2Dr, 4Dr, SW[3]	L	L	L
	Regal	2Dr, 4Dr[4]	M	M	M
	Riviera*	2Dr, Conv[6]	L	L	M
	Skyhawk	2Dr, 4Dr, SW	M	M	M
	Skylark	2Dr[4], 4Dr	M	M	M
	Somerset	2Dr		M	M
Cadillac	Brougham*	2Dr[6], 4Dr	L	L	L
	Cimarron	4Dr	M	M	M
	DeVille FWD*	2Dr, 4Dr		L	L
	DeVille RWD*	2Dr, 4Dr	L		
	Eldorado*	2Dr, Conv[6]	L	L	M
	Fleetwood (DeVille)*	2Dr, 4Dr		L	
	Fleetwood Limo FWD*	4Dr		L	L
	Fleetwood Limo RWD*	4Dr	L		
	Seville*	4Dr	L	L	M
Chevrolet	Astro Van	PV		L	L
	Camaro*	2Dr	M	M	M
	Caprice	2Dr, 4Dr, SW	L	L	L
	Cavalier	2Dr, 4Dr, SW, Conv*	M	M	M
	Celebrity	2Dr, 4Dr, SW	M	M	M
	Chevette	2Dr, 4Dr	S	S	S
	Citation	2Dr, 4Dr	M	M	
	Corvette*	2Dr, Conv[1]	S	S	S
	Impala	4Dr	L	L	
	Monte Carlo	2Dr	M	M	M
	Nova	4Dr		S	S
	Spectrum	2Dr, 4Dr		S	S
	Sprint	2Dr, 4Dr[1]		S	S

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Chrysler	E Class	4Dr	M		
	Executive Sedan*	4Dr	L		
	Laser	2Dr	S	S	S
	LeBaron	2Dr, 4Dr, SW,Conv*	M	M	M
	LeBaron GTS	4Dr		M	M
	Limousine*	4Dr		L	L
	New Yorker	4Dr	M	M	M
	New Yorker 5th Ave.	4Dr	L	L	L
	Newport	4Dr	L	L	L
Dodge	600	2Dr, 4Dr, Conv*	M	M	M
	Aries	2Dr, 4Dr, SW	M	M	M
	Caravan	PV	L	L	L
	Charger	2Dr	S	S	S
	Daytona	2Dr	S	S	S
	Diplomat	4Dr	L	L	L
	Lancer	4Dr		M	M
	Omni	4Dr	S	S	S
	Shelby	2Dr	S	S	S
Dodge/ Mitsubishi	Colt	2Dr, 4Dr	S	S	S
	Colt Vista	SW	M	M	M
	Colt Vista-4WD	SW		M	M
	Conquest	2Dr	S	S	S
Ferrari*	308 Quattro	2Dr, Conv[2]	S	S	
	328 GTB/GTS	2Dr, Conv			S
	Mondial Quattro	2Dr, Conv	M	M	M
	Testarossa	4Dr			M
Fiat*	Spider 2000	2Dr	S	S	
	X 1/9	2Dr	S	S	S

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Ford	Aerostar	PV			L
	Crown Victoria	2Dr, 4Dr, SW	L	L	L
	Escort	2Dr, 4Dr, SW	S	S**	S
	EXP*	2Dr	S	S	S
	LTD	4Dr, SW	M	M	M
	Mustang*	2Dr, Conv	M	M	M
	Taurus	4Dr, SW			M
	Tempo	2Dr, 4Dr	M	M	M
	Thunderbird	2Dr	M	M	M
GMC	Safari Van	PV		L	L
Honda	Accord	2Dr, 4Dr	S	S	M
	Civic	2Dr, 4Dr, SW	S	S	S
	Civic CRX*	2Dr	S	S	S
	Civic-4WD	SW		S	S
	Prelude	2Dr	S	S	S
Hyundai	Excel	2Dr, 4Dr			S
Isuzu	I-Mark	2Dr, 4Dr	S	S	S
	Impulse	2Dr	S	S	S
Jaguar*	XJ6	4Dr	L	L	L
	XJ-S	2Dr	M	M	M
	XJ-SC	Conv			M
Lincoln*	Continental	4Dr	M	M	M
	Mark VII	2Dr	M	M	M
	Town Car	4Dr	L	L	L
Lotus*	Esprit Turbo	2Dr	S	S	S

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Maserati*	425	4Dr			M
	Biturbo	2Dr	S	S	S
	Quattroporte	4Dr	L	L	L
	Spyder	Conv			S
Mazda	323	2Dr, 4Dr			S
	626	2Dr, 4Dr	S	S	S
	GLC	2Dr°, 4Dr°, SW	S	S	S
	RX-7*	2Dr	S	S	S
Mercedes-Benz*	190D/16V, E	4Dr	M	M	M
	300CD	2Dr	M	M	
	300D	4Dr	L	L	
	300E	4Dr			L
	300SD	4Dr	L	L	
	300SDL	4Dr			L
	300TD	SW	L	L	
	380SE	4Dr	L	L	
	380SL	Conv	S	S	
	420SEL	4Dr			L
	500SEC	2Dr	L	L	
	500SEL	4Dr	L	L	
	560SEC	2Dr			L
	560SEL	4Dr			L
	560SL	Conv			S
Mercury	Capri*	2Dr	M	M	M
	Cougar	2Dr	M	M	M
	Grand Marquis	2Dr, 4Dr, SW	L	L	L
	Lynx	2Dr, 4Dr, SW	S	S**	S
	Marquis	4Dr, SW	M	M	M
	Sable	4Dr, SW			M
	Topaz	2Dr, 4Dr	M	M	M
Merkur*	XR4Ti	2Dr		M	M

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Mitsubishi	Cordia	2Dr	S	S	S
	Galant	4Dr		M	M
	Mirage	2Dr		S	S
	Starion	2Dr	S	S	S
	Tredia	4Dr	S	S	S
Nissan	200SX	2Dr	S	S	S
	300ZX*	2Dr	S	S	S
	300ZX 2+2*	2Dr	S	S	S
	Maxima	4Dr, SW	M	M	M
	Pulsar	2Dr, 4Dr[4]	S	S	S
	Sentra	2Dr, 4Dr, SW	S	S	S
	Stanza	2Dr[4], 4Dr, SW[1]	S	S	S
	Stanza-4WD	SW			S
Oldsmobile	Calais	2Dr, 4Dr[1]		M	M
	Custom Cruiser	SW	L	L	L
	Cutlass	2Dr, 4Dr	M	M	M
	Cutlass Ciera	2Dr, 4Dr, SW	M	M	M
	Delta 88	2Dr, 4Dr	L	L	L
	Firenza	2Dr, 4Dr, SW	M	M	M
	Ninety-Eight FWD	2Dr, 4Dr		L	L
	Ninety-Eight RWD	2Dr, 4Dr	L		
	Omega	2Dr, 4Dr	M		
	Toronado*	2Dr	L	L	M
Peugeot	505	4Dr	M	M	M
	505	SW	L	L	L
	604*	4Dr	L		
Plymouth	Caravelle	4Dr		M	M
	Gran Fury	4Dr	L	L	L
	Horizon	4Dr	S	S	S
	Reliant	2Dr, 4Dr, SW	M	M	M
	Turismo	2Dr	S	S	S
	Voyager	PV	L	L	L

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Plymouth/ Mitsubishi	Colt	2Dr, 4Dr	S	S	S
	Colt Vista	SW	M	M	M
	Colt Vista-4WD	SW		M	M
	Conquest	2Dr	S	S	S
Pontiac	1000	2Dr, 4Dr	S	S	S
	6000	2Dr, 4Dr, SW	M	M	M
	Bonneville	4Dr	M	M	M
	Fiero*	2Dr	S	S	S
	Firebird*	2Dr	M	M	M
	Firefly	2Dr		S	S
	Grand Am	2Dr, 4Dr[1]		M	M
	Grand Prix	2Dr	M	M	M
	Parisienne	4Dr, SW	L	L	L
	Phoenix	2Dr, 4Dr	M		
	Sunbird	2Dr, 4Dr, SW, Conv*	M	M	M
Porsche*	911 Coupe	2Dr, Conv[6]	S	S	S
	928 Coupe	2Dr	S	S	S
	944 Coupe	2Dr	S	S	S
Renault	Alliance	2Dr, 4Dr, Conv[3],*	S	S	S
	Encore	2Dr, 4Dr	S	S	S
	Fuego	2Dr	S	S	
	Sportwagon	SW	S	S	S
Rolls Royce*	Camargue	2Dr	L	L	L
	Corniche	Conv	L	L	L
	Silver Spirit	4Dr	L	L	L
	Silver Spur	4Dr	L	L	L
Saab	900	2Dr, 4Dr	S	S	S
	9000*	4Dr			M

Make	Series Name	Body Style	Vehicle Size Class 1984	1985	1986
Subaru	DL/GL	2Dr[1], 4Dr, SW	S	S	S
	DL/GL-4WD	2Dr[1], 4Dr, SW	S	S	S
	Hardtop/XT Coupe	2Dr	S	S	S
	Hardtop/XT Coupe-4WD	2Dr	S	S	S
	Hatchback	2Dr	S	S	S
	Hatchback-4WD	2Dr	S	S	S
Toyota	Camry	4Dr	M	M	M
	Celica	2Dr, Conv[2],*	S	S	S
	Celica Supra*	2Dr	M	M	M
	Corolla	2Dr, 4Dr	S	S	S
	Cressida	4Dr, SW	M	M	M
	MR2*	2Dr		S	S
	Starlet	2Dr	S		
	Supra*	2Dr			M
	Tercel	2Dr, 4Dr, SW	S	S	S
	Tercel-4WD	SW	S	S	S
	Van	PV	S	S	S
Volkswagen	Cabriolet*	Conv		S	S
	Golf	2Dr, 4Dr		S	S
	GTI	2Dr		S	S
	Jetta	2Dr, 4Dr	S	S	S
	Quantum	4Dr, SW	M	M	M
	Quantum-4WD	SW		M	M
	Rabbit	2Dr, 4Dr, Conv*	S		
	Scirocco	2Dr	S	S	S
	Vanagon	PV	S	S	S
Volvo	240	2Dr[4], 4Dr, SW	M	M	M
	740/760*	4Dr, SW[3]	M	M	M
Yugo	Yugo	2Dr			S

Size Class:

S (Small) — wheelbase (after rounding to nearest inch) less than 100.
M (Midsize) — wheelbase (after rounding to nearest inch) in the range 100-109.
L (Large) — wheelbase (after rounding to nearest inch) greater than 109.

Body Style Abbreviations:

2Dr — Two-door
4Dr — Four-door
Conv — Convertible
PV — Passenger Van
SP — Sports and Specialty
SW — Station Wagon

Notes:

1 1986 models only
2 1985 models only
3 1985 and 1986 models only
4 1984 models only
5 1984 and 1986 models only
6 1984 and 1985 models only

* These cars are classified as sports or specialty models.
** Due to mid-year design changes, only collision loss data for the redesigned models were used.

Appendix A-2
1984-86 Vehicle Series Designations

Vans, Pickup Trucks, and Utility Vehicles

Make	Series Name	Vehicle Type	Size Class	Model Years
Chevrolet	Astro Cargo Van	Van		85-86
	G10 Chevyvan (1/2 T)	Van		84-86
	G10 Sportvan (1/2 T)	Van		84-86
	G20 Chevyvan (3/4 T)	Van		84-86
	G20 Sportvan (3/4 T)	Van		84-86
	S10	Pickup	Small	84-86
	C10/K10 (1/2 T)	Pickup	Standard	84-86
	C20/K20 (3/4 T)	Pickup	Standard	84-86
	El Camino	Pickup	Standard	84-86
	K10 Blazer (1/2 T)	Util. Veh.	Intermediate	84-86
	S10 Blazer	Util. Veh.	Intermediate	84-86
	C10/K10 Suburban (1/2 T)	Util. Veh.	Large	84-86
	C20/K20 Suburban (3/4 T)	Util. Veh.	Large	84-86
Dodge	B150 (1/2 T)	Van		84-86
	B250 (3/4 T)	Van		84-86
	Mini-Ram/Royal	Van		84-86
	D-50	Pickup	Small	84-86
	Rampage	Pickup	Small	84
	D150/W150 (1/2 T)	Pickup	Standard	84-86
	D250/W250 (3/4 T)	Pickup	Standard	84-86
	AD150/AW150 (1/2 T)	Util. Veh.	Intermediate	84-86
Ford	Aerostar Cargo Van	Van		86
	E-150 Club Wagon (1/2-3/4 T)	Van		84-86
	E-150 Econoline (1/2-3/4 T)	Van		84-86
	E-250 Club Wagon (3/4 T)	Van		84-86
	E-250 Econoline (3/4 T)	Van		84-86
	Ranger	Pickup	Small	84-86
	F-150 (1/2-3/4 T)	Pickup	Standard	84-86
	F-250 (3/4 T)	Pickup	Standard	84-86

Make	Series Name	Vehicle Type	Size Class	Model Years
Ford (continued)				
	Bronco II	Util. Veh.	Small	84-86
	Bronco	Util. Veh.	Intermediate	84-86
GMC	G1500 Rally Wagon (1/2 T)	Van		84-86
	G1500 Vandura (1/2 T)	Van		84-86
	G2500 Rally Wagon (3/4 T)	Van		84-86
	G2500 Vandura (3/4 T)	Van		84-86
	Safari Cargo Van	Van		85-86
	S15	Pickup	Small	84-86
	Caballero	Pickup	Standard	84-86
	C1500/K1500 (1/2 T)	Pickup	Standard	84-86
	C2500/K2500 (3/4 T)	Pickup	Standard	84-86
	K1500 Jimmy (1/2 T)	Util. Veh.	Intermediate	84-86
	S15 Jimmy	Util. Veh.	Intermediate	84-86
	C1500/K1500 Suburban (1/2 T)	Util. Veh.	Large	84-86
	C2500/K2500 Suburban (3/4 T)	Util. Veh.	Large	84-86
Isuzu	Long Bed	Pickup	Small	84-86
	Long Cab	Pickup	Small	86
	Standard Bed	Pickup	Small	84-86
	Trooper II	Util. Veh.	Intermediate	84-86
Jeep	Comanche	Pickup	Small	86
	Scrambler	Pickup	Small	84-85
	J10 (1/2 T)	Pickup	Standard	84
	J10/J20 (3/4 T)	Pickup	Standard	84-86
	CJ-7	Util. Veh.	Small	84-86
	Cherokee	Util. Veh.	Intermediate	84-86
	Grand Wagoneer	Util. Veh.	Intermediate	84-86
	Wagoneer	Util. Veh.	Intermediate	84-86

Make	Series Name	Vehicle Type	Size Class	Model Years
Mazda	Cab Plus	Pickup	Small	86
	Long Bed	Pickup	Small	84, 86
	Standard Bed	Pickup	Small	84, 86
Mitsubishi	Standard Bed	Pickup	Small	84-86
	Montero	Util. Veh.	Small	84-86
Nissan	King Cab	Pickup	Small	84-86
	Long Bed	Pickup	Small	84-86
	Standard Bed	Pickup	Small	84-86
Subaru	Brat	Pickup	Small	84-86
Suzuki	Jimny	Util. Veh.	Small	84-85
	Samurai	Util. Veh.	Small	86
Toyota	Cargo Van	Van		84-86
	Long Bed (1/2 T)	Pickup	Small	84-86
	Long Bed (3/4 T)	Pickup	Small	84
	Standard Bed	Pickup	Small	84-86
	Xtra Cab	Pickup	Small	84-86
	4Runner	Pickup	Standard	84-86
	4Runner Wagon	Util. Veh.	Intermediate	86
	Land Cruiser	Util. Veh.	Intermediate	84-86
Volkswagen	Vanagon Camper	Van		84-86

Appendix B Definitions

Average Loss Payment per Claim - The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid; expressed as dollars per claim.

Average Loss Payment per Insured Vehicle Year - For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, divided by 100; expressed as dollars per insured vehicle year. It should be noted that this definiton differs from the commonly used insurance term, pure premium, but yields similar results.

Claim Frequency - The number of claims for a group of vehicles, divided by the exposure for that group; expressed as claims per one hundred insured vehicle years.

Collision Coverages - As defined in insurance contracts, the coverage under which people insure their own vehicle against loss caused by collision.

Deductible Amount - That portion of the collision damage cost borne by the policyholder. For computing results, deductible amounts are split into two groups; less than $150 (mainly $50 and $100 deductibles) and greater than or equal to $150 (mainly $200 and $250 deductibles).

Exposure - The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment - That portion of the collision damage cost borne by the insurer; in general, the total collision damage cost minus the deductible amount.

Operator Age Group - The factor which distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see Youthful Operator).

Rated Driver - The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Vehicle Class - There are four vehicle classes, defined as follows:

1. **Passenger Cars** - There are four major body style groupings of passenger cars — regular two-door models, regular four-door models, station wagons and passenger vans, and sports and specialty models. Sports and specialty models include all two-seater cars, all convertibles, all midsize and large cars with two or fewer designated rear seating positions, and all luxury cars. Each body style group is further divided into size class subgroups based on wheelbase (rounded to nearest inch) defined as follows:

   Small - Vehicles with wheelbases less than or equal to 99 inches.

   Midsize - Vehicles with wheelbases greater than 99 inches and less than or equal to 109 inches.

   Large - Vehicles with wheelbases greater than 109 inches.

2. **Vans** - Fully enclosed vehicles with either no hood or a very short hood, in which the engine is placed at least 50 percent behind the windshield. The driver's position is usually well forward, nearly beside the engine, usually within the forward 25 percent of the wheelbase. These vehicles are designed for cargo transport and are equipped with a right side cargo access door and rear door. The cargo area is not separated from the passenger area — both are enclosed under the same roof. Some passenger vans are equipped with additional seats in the cargo area and usually have additional side windows also.

3. **Pickups** - Cargo-carrying vehicles, usually on a truck chassis, with an enclosed cab and a separate open cargo area. The open cargo area generally is a box with raised sides with an opening tailgate. There are also a small number of auto pickups which are similar to regular pickups except that they are built on a passenger car chassis. Pickups are further divided into two subgroups based on curb weight — small pickups (less than 3,200 pounds) and standard pickups (3,200 pounds or more).

4. **Utility Vehicles** - Vehicles built on a heavy-duty chassis capable of off-road use. They are of conventional construction with the driver behind the engine. The cargo and passenger areas are integral with the driver area. Many of these vehicles are equipped with soft or removable tops. Frequently, these vehicles are equipped with four-wheel drive. Utility vehicles are further divided into three subgroups based on wheelbase — small utility vehicles (less than 100 inches), intermediate utility vehicles (from 100 to 120 inches), and large utility vehicles (greater than 120 inches).

Vehicle Identification Number (VIN) - A code, variously comprising both numbers and letters; normally, 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, contains coding which identifies the make, series, model year, and other characteristics of each vehicle.

Vehicle Series - A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

Youthful Operator - For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of age.

HLDI Publications

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INSURANCE COLLISION REPORT

Initial Results for 1987 Automobiles

Highway Loss Data Institute
R87-1

Highway Loss Data Institute
Insurance Collision Report

Initial Results for 1987 Automobiles
HLDI R87-1

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SUMMARY

This Highway Loss Data Institute report presents results of the collision coverage loss experience of 1987 model year passenger cars during their first months of availability.

- 1987 models show large variations in collision loss results among individual vehicle series. Claim frequencies ranged from 5.0 to 16.7 claims per 100 insured vehicle years, average loss payments per claim ranged from about $800 to $2,800, and average loss payments per insured vehicle year were from $70 to nearly $420.
- Even among cars of the same size class and body style, there were large variations in the results for individual vehicle series.
- Collision coverage claim frequencies varied inversely with car size (i.e., collision claim frequencies tended to decrease with increasing car size).
- The overall average loss payment per claim increased six percent for 1987 over 1986 models and the claim frequency decreased by three percent, resulting in an increase of approximately $6 in the average loss payment per insured vehicle year.

INTRODUCTION

The Highway Loss Data Institute (HLDI) is a nonprofit, public service organization that gathers, processes, and publishes insurance data concerned with human and economic losses resulting from highway crashes and especially with the ways such losses vary among different kinds of vehicles.

This report summarizes the collision coverage loss results of 1987 model year private passenger cars during their initial period of exposure (see Appendix C for definition) — June 1986 through February 1987. It is based on collision coverage and loss data supplied by 13 insurers: Aetna, Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, Sentry, State Farm, Travelers, and USAA.

Descriptions of the sources and nature of the data used are presented in Appendix A. The data analysis methods are discussed in Appendix B and definitions are given in Appendix C. A complete list of the vehicle series designations by make and size class appears in Appendix D.

It is intended that the dissemination of this and other HLDI reports will contribute to research into ways for reducing crash damage, crash injuries, and theft losses, and that it will inform the public about differences in the loss experience produced by different kinds of vehicles.

RESULTS AND DISCUSSION

Comparison of Results for Individual Series—1987 Models

Table 1 presents detailed collision coverage loss results for 1987 models during their initial exposure period, June 1986 through February 1987. Aggregated results are presented for all 1987 models combined and for passenger cars grouped by body style and vehicle size. Results are also presented for each individual model with at least 1,000 insured vehicle years of exposure. Seventy-two models, out of a total of more than 300 contained in the HLDI data base for 1987 models, had accumulated sufficient exposure to meet the reporting threshold; some 1987 models were introduced in the first half of calendar year 1986 (for example, the Nissan Sentra and Maxima, Dodge Omni, and Plymouth Horizon). Results for additional models will be reported subsequently as more exposure is accumulated.

The results displayed are exposure (measured in insured vehicle years) and relative values for three quantities that summarize the collision losses: claim frequency per 100 insured vehicle years, average loss payment per claim, and average loss payment per insured vehicle year. The relative results are based on the following overall results for all 1987 models combined: for claim frequency results, 100 is equivalent to 10.4 claims per 100 insured vehicle years; for average loss payment per claim, 100 is equivalent to $1,827; and for average loss payment per insured vehicle year, 100 is equivalent to $191. For example, the relative claim frequency of 137 for the four-door Volkswagen Jetta indicates a claim frequency that is 37 percent higher than 10.4 (the result for all 1987 models combined). In contrast, the four-door Ford Escort's relative claim frequency of 88 is 12 percent lower than the 1987 overall claim frequency. (The overall results are discussed further on page 7 and are presented for comparison in Table 2.)

The results shown in Table 1 were standardized to minimize effects due to differences in the mix of operator age groups and deductible amounts among different vehicles. Both the frequency and average size of collision coverage losses vary with the deductible amount and the age group of the operators. Standardizing these two nonvehicle factors ensures that their mix is the same for each result. It should be noted, however, that other nonvehicle factors could vary among different vehicles and that such factors could affect the results presented in this report. The standardization procedure is described in detail in Appendix B.

The individual models in Table 1 are listed by body style within car size group in ascending order of their relative average loss payments per insured vehicle year. It should be noted that, in general, the greater the exposure associated with a result, the more confidence can be placed in it.

As has been the case with previous HLDI collision reports, there are large variations in loss experience among the individual cars. The Chevrolet Astro Van's relative average loss payment per insured vehicle year of 37 was the lowest of all models. The only other 1987 passenger vehicles with average loss payments per insured year less than half the overall combined 1987 result were the Ford Taurus station wagon (43), the Dodge Diplomat (46), and the Ford Aerostar (47). At the other extreme, the Mazda RX-7 had the highest relative average loss payment per insured vehicle year (219). Five other passenger vehicles also had average loss payments per insured vehicle year that exceeded the average for all 1987 models by more than 50 percent: the Toyota Celica (176), Pontiac Firebird (164), Dodge Charger (161), Chevrolet Camaro (156), and Honda Civic CRX (153).

The four-door Ford Crown Victoria had the lowest relative claim frequency (48), and it was the only passenger vehicle with a claim frequency less than half the overall result for 1987 models. The Pontiac Firebird had the highest relative claim frequency (161), and it was the only vehicle with a claim frequency at least 50 percent higher than the overall result.

The Chevrolet Astro Van was also the car with the lowest relative average loss payment per claim (43), and the car with the highest was the Mazda RX-7 (151).

Comparing all three measures of collision loss, the Mazda RX-7 had the highest relative results for both average loss payment per insured vehicle year (219) and average loss payment per claim (151), as well as the third highest relative claim frequency (145). Relative claim frequency results for the Pontiac Firebird and Toyota Celica (161 and 148, respectively), and relative average loss payment per insured vehicle year results for these vehicles (164 and 176, respectively) were among the three highest values for each of these collision loss measures. Relative results for average loss payment per insured vehicle year and average loss payment per claim of the Chevrolet Astro Van, Dodge Caravan, Ford Taurus station wagon, and Ford Aerostar were among the five lowest

(continued on page 7)

TABLE 1
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
ALL	**ALL**	**273894**	**100 = 10.4**	**100 = $1,827**	**100 = $191**
		SMALL CARS			
TWO-DOOR MODELS		**49181**	**126**	**107**	**134**
Toyota	Tercel	1669	104	71	74
Honda	Civic	1897	104	77	80
Ford	Escort	2350	121	97	117
Chevrolet	Chevette	1233	117	103	120
Honda	Prelude	2123	114	110	125
Nissan	Sentra	18065	124	114	141
Plymouth	Turismo	3882	137	104	143
Dodge	Charger	4123	139	116	161
Toyota	Celica	2458	148	119	176
FOUR-DOOR MODELS		**57036**	**104**	**95**	**100**
Chevrolet	Nova	1389	92	76	70
Ford	Escort	1123	88	90	79
Dodge	Shadow	1032	99	86	86
Dodge	Omni	10672	99	88	87
Plymouth	Horizon	13847	98	94	92
Hyundai	Excel	2735	115	81	93
Toyota	Corolla	2813	97	99	96
Plymouth	Sundance	1369	113	86	97
Mazda	323	1489	113	90	101
Honda	Civic	3053	104	102	107
Nissan	Sentra	9058	114	100	114
Volkswagen	Jetta	1347	137	92	125
Mazda	626	1917	109	125	136

(See notes cn page 6.)

TABLE 1 (Cont'd)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		SMALL CARS (CONT'D)			
STATION WAGONS/PASSENGER VANS		**5446**	**86**	**99**	**85**
Nissan	Sentra	2059	102	98	100
SPORTS & SPECIALTY		**7769**	**127**	**133**	**169**
Honda	Civic CRX	1803	137	112	153
Mazda	RX-7	1806	145	151	219
		MIDSIZE CARS			
TWO-DOOR MODELS		**18462**	**103**	**98**	**100**
Oldsmobile	Cutlass	1484	71	114	80
Ford	Tempo	1310	121	72	87
Pontiac	Grand Am	3225	90	98	88
Chevrolet	Monte Carlo	1370	76	123	94
Honda	Accord	1539	109	90	98
Ford	Thunderbird	1012	81	123	100
Oldsmobile	Calais	1303	114	92	105
Chevrolet	Cavalier	2221	140	83	116
FOUR-DOOR MODELS		**63455**	**93**	**98**	**92**
Toyota	Camry	3749	73	88	65
Chevrolet	Celebrity	2876	72	95	69
Oldsmobile	Cutlass Ciera	2920	66	110	73
Buick	Century	1874	83	91	75
Pontiac	6000	1175	89	86	77
Pontiac	Grand Am	1205	89	88	78
Ford	Tempo	2463	106	81	86
Chevrolet	Cavalier	1691	119	75	89
Plymouth	Reliant	1398	78	116	90
Chrysler	New Yorker	1184	76	126	96

(See notes on page 6.)

TABLE 1 (Cont'd)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		MIDSIZE CARS (CONT'D)			
Honda	Accord	8607	101	97	98
Ford	Taurus	2016	98	102	100
Nissan	Maxima	17997	99	110	108
Nissan	Stanza	3809	124	91	112
STATION WAGONS/PASSENGER VANS		**8747**	**81**	**101**	**82**
Ford	Taurus	1202	79	54	43
Nissan	Maxima	1347	85	139	118
SPORTS & SPECIALTY		**12254**	**116**	**118**	**137**
Volvo	740/760	1034	90	134	120
Toyota	Supra	1113	94	138	129
Ford	Mustang	1190	124	119	148
Chevrolet	Camaro	2094	136	114	156
Pontiac	Firebird	1565	161	102	164
		LARGE CARS			
TWO-DOOR MODELS		**926**	**	**	**
FOUR-DOOR MODELS		**25705**	**70**	**94**	**65**
Dodge	Diplomat	1563	52	88	46
Mercury	Grand Marquis	2794	72	70	51
Buick	Electra	1185	64	83	53
Chevrolet	Caprice	2639	73	76	55
Buick	LeSabre	2640	79	77	61
Chrysler	New Yorker 5th Ave	6230	64	101	65
Ford	Crown Victoria	2068	48	138	66
Pontiac	Bonneville	1447	79	86	68
Oldsmobile	Ninety-Eight	1675	70	128	89
Oldsmobile	Delta 88	2778	89	104	92

(See notes on page 6.)

TABLE 1 (Cont'd)
INSURANCE LOSSES, COLLISION COVERAGES
1987 MODELS - PASSENGER CARS

MAKE	SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
		LARGE CARS (CONT'D)			
STATION WAGONS/PASSENGER VANS		**15323**	**77**	**65**	**50**
Chevrolet	Astro Van	2180	86	43	37
Ford	Aerostar	3800	73	65	47
Dodge	Caravan	3545	73	68	50
Plymouth	Voyager	3510	82	71	58
SPORTS & SPECIALTY		**9591**	**76**	**114**	**87**
Mercedes	260/300 Series*	1123	70	115	80
Lincoln	Town Car	2557	80	102	81
Cadillac	Brougham	1282	75	114	86
Cadillac	DeVille 4D	2087	78	114	90

Notes for Table 1:

Results are standardized to the distribution:

Deductible	Youthful Operator	No Youthful Operator
<$150	5%	50%
≥$150	5%	40%

Series are ranked within group and subgroup by ascending average loss payment per insured vehicle year. Series with less than 1,000 insured vehicle years of exposure are not summarized.

*300 Series includes 300E, 300D, and 300TD.

**Aggregated results are not reported for large two-door models due to insufficient exposure.

(continued from page 2)

values of each of these loss measures. The relative claim frequencies of these vehicles ranged from 73 to 86. As pointed out in earlier collision coverage reports, even among cars of the same size and body style, there can be large variations in the collision coverage loss results for individual vehicle series. For example, among midsize four-door models, the ranges for each of the three loss measures were: claim frequency, 66-124; average loss payment per claim, 75-126; and average loss payment per insured vehicle year, 65-112.

1987 Model Results By Car Size

Table 1 also provides aggregated results for passenger cars grouped by body style and vehicle size. (No results are provided for large two-door vehicles because of insufficient exposure.) The aggregated results indicate that collision claim frequencies (as well as, average loss payments per insured vehicle year) tend to decrease with increasing car size. For example, the relative values of claim frequency for all *four-door* 1987 passenger vehicles are as follows: small vehicles (104), midsize vehicles (93), and large vehicles (70). This inverse relationship between collision claim frequencies and vehicle size is also apparent for the other body style groups. Average collision loss payments per claim, however, do not indicate a similar relationship in each body style group.

Comparison of 1986 and 1987 Model Year Overall Results

Table 2 compares the overall claim frequency, average loss payment per claim, and average loss payment per insured vehicle year for 1987 models during their initial exposure period with those of 1986 models during the same calendar period and for the corresponding period one year earlier. Because the comparisons of the initial results for 1987 models and those for 1986 models are for calendar periods that are one year apart, they could be influenced by differences not only between model years but also calendar periods. In comparisons based on the results from the same calendar period, the 1986 vehicles would be an average of one year older than the 1987 vehicles, and the comparisons could be influenced by the differences in the vehicle ages. For these reasons, two sets of results for 1986 models are presented in Table 2 for comparisons with the 1987 model year results. The initial 1986 results are based on the exposure period one year earlier than that of the second set of 1986 model results, which are based on the same exposure period as the 1987 model year results. The June 1986 through February 1987 results for 1986 models were separately adjusted to ensure that the contribution of exposure from each month was comparable to that for the 1987 models. The monthly adjustment procedure is described in detail in Appendix B.

The overall results for 1986 and 1987 models during the June 1986 through February 1987 calendar period show that the frequency of collision claims decreased by three percent and the average loss payment per claim increased by six percent for 1987 models. These combined for a three percent increase in the average loss payment per insured vehicle year for the 1987 models.

TABLE 2 Overall Collision Coverage Loss Experience of 1987 Models Compared to 1986 Models

	1986 Models		1987 Models	Percentage Change
Loss Category	**6/85—2/86***	**6/86—2/87****	**6/86—2/87**	**6/86—2/87**
Claim Frequency Per 100 Insured Vehicle Years	11.1	10.7	10.4	-3
Average Loss Payment Per Claim	$1,762	$1,723	$1,827	+6
Average Loss Payment Per Insured Vehicle Year	$ 196	$ 185	$ 191	+3

*Comparisons to 1987 models may be influenced by model year and calendar period differences.
**Comparisons to 1987 models may be influenced by model year and vehicle age differences.

APPENDIX A
Sources and Nature of Data

Both policy and claim-related collision coverage data for 1987 model year vehicles in the calendar period June 1986 through February 1987 were used in the preparation of this report. "Assigned risk," fleet policies, and all data from Massachusetts were excluded. Only payments for damage to insured automobiles were included; monies recovered from the salvage of wrecked vehicles were excluded, as were monies subsequently recovered by the companies through subrogation actions. Data for June 1986 through February 1987 were collected from the following companies: Aetna, Allstate, Fireman's Fund, GEICO, Kemper, Liberty Mutual, Nationwide, Prudential, Safeco, Sentry, State Farm, Travelers, and USAA.

Insurance Policy Data

Insurance policy data, as distinct from claim data, describe the characteristics of an insured vehicle, including its make and series and the nature of its collision coverage. Policy data used in this report included the following basic information:

- Vehicle Identification Number (VIN)*
- Deductible Amount*
- Rated Driver Characteristics*
- Date and Nature of Relevant Changes in Coverage

Insurance Claim Data

Insurance claim data report the characteristics of an insured vehicle for which a collision coverage claim is made, the initiation of the claim, and/or the corresponding payment. Claim data used in the report included the following basic information:

- Vehicle Identification Number (VIN)
- Crash Date
- Loss Payment Amount

The dollar amounts reported represented loss payments made to or on behalf of the policyholder for damage to the insured vehicle.

APPENDIX B
Method of Data Analysis

Vehicle Description and Identification

The Vehicle Identification Numbers (VINs) of most new automobiles sold in the United States are individually unique numbers that contain, in coded form, detailed information as to each vehicle's make, series, and other distinguishing characteristics.

The specific vehicle types for which results are presented in this report were derived from the VINs of the individual automobiles.

*See Appendix C for definitions.

Only data with valid VINs were used for this report. Each VIN was decoded into a set of specific vehicle characteristics. For the purposes of this report the vehicle characteristics of primary concern were make, series, and vehicle size class (Appendix D). The use of VINs also permits analyses of other very specific vehicle characteristics such as horsepower, body style, etc.

Exposure

Exposure, in insured vehicle years, was computed for each individual vehicle from the coverage data. The total number of insured vehicle years for each vehicle series was then obtained by accumulating the exposure for all of the individual vehicles of that vehicle series.

The exposure for each vehicle series was obtained for the four combinations of deductible amount and operator age group, a, b, c, d, shown below:

Deductible	Youthful Operator	No Youthful Operator
$<$ \$150	a	b
$\geq$ \$150	c	d

Claim Frequency

Both pending and paid claims for an individual vehicle were first matched with its corresponding coverage data to ensure that the crash had occurred within an appropriate period of collision coverage for that vehicle. In every instance in which multiple claims were made for the same crash, they were treated as a single claim in the calculations of claim frequency. Claims that were settled without payment, as well as those paid even though the damage was less than the deductible amount, were excluded from the computations. All remaining claims for each vehicle series were used, together with the corresponding exposure, to compute the claim frequency: the number of claims per 100 insured vehicle years.

For each vehicle series, claim frequencies were computed for each of the four combinations of deductible and operator age group, a, b, c, d, shown in the diagram.

Average Loss Payment Per Claim

Paid claims for each vehicle series were used to compute its average loss payment per claim. They were summed and divided by the number of claims to produce the average loss payment per claim. Claims that were settled without payment, as well as those paid even though the damage was less than the deductible amount, were excluded from the computations. In every instance in which multiple claims and/or multiple payments were made for the same crash, they were treated as a single claim and/or single payment in the calculation of average loss payment.

Average loss payments per claim were also obtained for each combination of deductible amount and operator age group.

Average Loss Payment Per Insured Vehicle Year

The average loss payment per insured vehicle year for each vehicle series was obtained by multiplying the claim frequen-

cy per 100 insured vehicle years by the average loss payment per claim, and dividing the result by 100.

Average loss payments per insured vehicle year were also obtained for each combination of deductible amount and operator age group.

Standardization

It is well known that loss experience can vary substantially in relation to certain nonvehicle factors. Two important such factors are the deductible amount of the coverage and the operator age group; both claim frequency and average loss payment vary with these factors. In the case of the operator age group, youthful operators generally generate higher insurance losses than older drivers. Thus, if compared vehicles have different proportions of youthful operators, this difference, if not taken into consideration, would be sufficient to bias the comparison. Results obtained from the two deductible categories, less than $150 and greater than or equal to $150, also vary. For example, average loss payments for the higher deductibles are greater than those for the lower deductibles. Again, if compared vehicles have different proportions of lower deductible coverages, this difference, if not taken into consideration, would also be sufficient to bias the comparison.

In order to remove any biases in the comparison of results that could arise because of differences attributable to variations among different vehicles in deductible amount and operator age groups, results were first adjusted or standardized so as to equalize the effects of the two nonvehicle factors in the standardized results. In this procedure, a weighted average of the actual results for each combination of deductible amount and operator age group was computed using the standardization weights shown in the table. Because the same weights were always used, the effects due to the nonvehicle factors were present in equal amounts in the standardized results. Therefore, to the extent that the age distributions within each operator age group and the deductible distributions within each deductible group do not vary substantially for different vehicles, these effects can no longer bias comparisons of results.

The standardization procedure employed is widely used in health statistics.* The basic principle of the method is the introduction of a selected population with a standard distribution across the combinations of deductible amount and operator age group as represented by the standardization weights in the table.

*For example, see Armitage, P. *Statistical Methods in Medical Research*, Wiley, New York (1971)

STANDARDIZATION WEIGHTS

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
<$150	0.05	0.50	0.55
≥$150	0.05	0.40	0.45
Combined	0.10	0.90	1.00

Mathematical Description of Standardization Procedure

The standardization procedure can be represented mathematically as follows:

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
<$150	X_{11}	X_{12}	$X_{1.}$
≥$150	X_{21}	X_{22}	$X_{2.}$
Combined	$X_{.1}$	$X_{.2}$	$X_{..}$

where,

X_{ij} represents a computed claim frequency for a particular vehicle series with respect to the deductible amount i and age group j,

and

i = 1 for deductibles <$150 and 2 for deductibles ≥$150,

j = 1 for youthful operator group and 2 for no youthful operator group,

$X_{.j}$ represents the computed claim frequency for all deductibles combined for age group j,

$X_{i.}$ represents the computed claim frequency for both operator age groups combined for deductible amount group i, and,

$X_{..}$ represents the computed claim frequency for all deductibles and both age groups combined.

Now, if weights are defined as follows:

Deductible Amount	Operator Age Group: Youthful Operator	No Youthful Operator	Combined
<$150	W_{11}	W_{12}	$W_{11} + W_{12}$
≥$150	W_{21}	W_{22}	$W_{21} + W_{22}$
Combined	$W_{11} + W_{21}$	$W_{12} + W_{22}$	1

where $W_{11} + W_{21} + W_{12} + W_{22} = 1$,

then the standardized claim frequency for the particular vehicle series is:

$$W_{11}X_{11} + W_{21}X_{21} + W_{12}X_{12} + W_{22}X_{22}$$

and, if A_{ij} represents the computed average loss payment per claim for a particular vehicle series, then the standardized average loss payment per claim is:

$$\frac{W_{11}X_{11}A_{11} + W_{21}X_{21}A_{21} + W_{12}X_{12}A_{12} + W_{22}X_{22}A_{22}}{W_{11}X_{11} + W_{21}X_{21} + W_{12}X_{12} + W_{22}X_{22}}$$

The standardized average loss payment per insured vehicle year is obtained by multiplying the standardized claim frequency by the standardized average loss payment and dividing by 100.

Similarly, it is possible to standardize within a deductible category or within an operator age group by using the appropriate combined weights. The standardized claim frequency for youthful operators, for example, would be:

$$(W_{11} + W_{12})X_{11} + (W_{21} + W_{22})X_{21},$$

and the standardized claim frequency for deductibles greater than or equal to $150 would be:

$$(W_{11} + W_{21})X_{21} + (W_{12} + W_{22})X_{22}.$$

These latter standardizations, using the combined weights, enable valid comparisons to be made between the results for different deductible groups or between the results for different operator age groups without the effects of the other factor biasing the comparisons.

Example

For the 1987 Toyota Celica, the four claim frequencies were:

$X_{11} = 24.7$ $X_{12} = 17.2$ $X_{21} = 18.1$ $X_{22} = 11.6$

and the weights were:

$W_{11} = 0.05$ $W_{12} = 0.50$ $W_{21} = 0.05$ $W_{22} = 0.40$

The standardized claim frequency was:

$(0.05)(24.7) + (0.50)(17.2) + (0.05)(18.1) + (0.40)(11.6) = 15.4.$

Monthly Exposure Adjustment

To compare the results from new model year cars during their initial period of availability with the corresponding results from the previous model year's cars, it is necessary to adjust the latter results because of differences in the mix of exposure by month which contribute to that result. For 1987 models, exposure in each successive month increases as more of the new model cars are sold, and therefore there is more exposure from the later months than from the earlier months. For this same time period, nearly all of the 1986 cars are on the road so that exposure in each month is essentially the same.

The effects of this difference in exposure can be removed by standardizing the monthly proportions of exposure in the results for the two model years. In the adjustment employed, results for the 1986 models were adjusted to have the monthly mix of exposure corresponding to the 1987 models, as shown in the following table.

MONTHLY ADJUSTMENT WEIGHTS

June	July	Aug.	Sept.	
0.01	0.02	0.02	0.03	
Oct.	**Nov.**	**Dec.**	**Jan.**	**Feb.**
0.07	0.11	0.19	0.26	0.29

Analogous to the earlier discussion of the standardization procedure for age and deductible amount, let

X_m represent a computed claim frequency adjusted for deductible amount and age in month m for a particular 1986 vehicle series, and

W_m represent the monthly adjustment weights cited in the preceding table.

Thus, the standardized claim frequency adjusted for monthly exposure is:

$$\sum W_m X_m.$$

Similarly, if A_m represents the computed average loss payment per claim adjusted for deductible amount and age in month m for a particular 1986 vehicle series, then the standardized average loss payment per claim is:

$$\frac{\sum W_m X_m A_m}{\sum W_m X_m}$$

Thus, using these weights, weighted averages of standardized monthly claim frequency and average loss payment per claim results were computed for 1986 model year cars. Recall that the standardized average loss payment per insured vehicle year is then obtained by multiplying the standardized claim frequency by the standardized average loss payment per claim and dividing by 100. The results thus obtained are both standardized for age and deductible and adjusted for monthly exposure differences.

An assumption made in computing a standardized and adjusted result is that exposure in each month is independent of the factors deductible amount and operator age group. This assumption is valid because the distributions of exposure by deductible amount and operator age group are approximately the same for each month.

APPENDIX C Definitions

Average Loss Payment Per Claim — The total of all loss payments made for the claims for a group of vehicles, divided by the number of claims paid.

Average Loss Payment Per Insured Vehicle Year — For a group of vehicles, the product of Claim Frequency and Average Loss Payment per Claim, expressed as dollars per insured vehicle year. It should be noted that this definition differs from the commonly used insurance term, pure premium, but yields similar results.

Claim Frequency — The number of claims for a group of vehicles, divided by the exposure for that group.

Collision Coverages — As defined in insurance contracts, the coverage under which people insure their own vehicle against loss caused by collision.

Deductible Amount — That portion of the collision damage cost borne by the policyholder. For computing results, deductible amounts are split into two groups; less than $150 (mainly $50 and $100 deductibles) and greater than or equal to $150 (mainly $200 and $250 deductibles).

Exposure — The time interval an individual vehicle is insured. Exposure for a group of vehicles is expressed in units of insured vehicle years.

Loss Payment — That portion of the collision damage cost borne by the insurer; in general, the total collision damage cost minus the deductible amount.

Operator Age Group — The factor which distinguishes those vehicles whose rated driver is youthful from those vehicles whose rated driver is not youthful (see Youthful Operator).

Rated Driver — The driver who, for insurance purposes, is considered to represent the greatest loss potential for the insured vehicle.

Vehicle Identification Number (VIN) — A code, variously comprising both numbers and letters; normally, 8 to 17 characters in length, assigned to each vehicle by its manufacturer. The VIN uniquely identifies the vehicle within at least a ten-year time span and, in recent model year vehicles, contains coding which identifies the make, series, model year, and other characteristics of each vehicle

Vehicle Classifications — There are four major body style groupings of passenger cars — regular two-door models, regular four-door models, station wagons, and sports and specialty models. Sports and specialty models include all two-seater cars, all convertibles, all midsize and large cars with two or fewer designated rear seating positions, and all luxury cars. Body styles are divided into size classes based on wheelbase (rounded to the nearest inch) defined as follows:

Small — Vehicles with wheelbases less than or equal to 99 inches.

Midsize — Vehicles with wheelbases greater than 99 inches and less than or equal to 109 inches.

Large — Vehicles with wheelbases greater than 109 inches.

Vehicle Series — A name denoting a family of vehicles, within a make, with the same wheelbase and a degree of commonality in construction such as body, chassis, etc.

Youthful Operator — For the purposes of this report, all males (married or single) under 25 years of age and all unmarried females under 25 years of age.

APPENDIX D 1987 Vehicle Series Designations

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Acura	Small	Integra	2 DR	96.5	RS,LS,LS Special
		Integra	4 DR	99.2	RS,LS
	Midsize	Legend 2D	SP	106.5	Sunroof,Sunroof+ Option
		Legend 4D	SP	108.7	Sunroof,Sunroof+ Option
Alfa Romeo	Small	Milano	4 DR	98.8	Green,Platinum,Gold, Silver
		Spider Conv.	SP	88.6	Veloce,Graduate, Quadrifoglio
American	Midsize	Eagle	4 DR	109.3	
		Eagle	SW	109.3	Limited
Aston Martin	Midsize	Saloon	SP	102.8	
		Vantage	SP	102.8	
		Volante	SP	102.8	
	Large	Lagonda	SP	114.6	
Audi	Small	4000 Quattro	SP	99.4	S
	Midsize	GT Coupe	2 DR	99.8	
		4000	4 DR	99.8	S
		5000	SP	105.8	S,CS
		5000 Quattro SW	SP	105.8	CS
		5000 Quattro 4D	SP	105.8	CS
		5000 SW	SP	105.8	S
Austin Rover	Midsize	Sterling 825	SP	108.6	S,SL
Avanti	Midsize	Avanti Conv.	SP	109.0	
		Avanti II	SP	109.0	
Bentley	Large	Continental Conv.	SP	120.5	
		Eight	SP	120.5	
		Mulsanne	SP	120.5	
		Mulsanne-L	SP	124.0	

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
BMW	Midsize	M6	SP	103.5	
		325/325e 2D	SP	101.2	
		325/325e 4D	SP	101.2	
		325i Conv.	SP	101.2	
		325i 2D	SP	101.2	
		325i 4D	SP	101.2	
		524TD	SP	103.3	
		528e	SP	103.3	
		535i	SP	103.3	
		635CSi/L6	SP	103.5	
	Large	L7	SP	110.0	
		735i	SP	110.0	
Buick	Midsize	Century	2 DR	104.9	Custom,Limited
		Century	4 DR	104.9	Custom,Limited, T-Type
		Century	SW	104.9	Custom,Estate
		Regal	2 DR	108.1	Limited,T-Type
		Riviera	SP	108.0	T-Type,Luxury
		Skyhawk	2 DR	101.2	Custom,Limited,Sport, T-Type
		Skyhawk	4 DR	101.2	Custom,Limited
		Skyhawk	SW	101.2	Custom,Limited
		Skylark	4 DR	103.4	Limited
		Somerset	2 DR	103.4	Custom,Limited,T-Type
	Large	Electra	2 DR	110.8	Park Avenue
		Electra	4 DR	110.8	Park Avenue,T-Type, 380
		Electra	SW	116.0	Estate
		LeSabre	2 DR	110.8	Custom,Limited
		LeSabre	4 DR	110.8	Custom,Limited
		LeSabre	SW	116.0	Estate
Cadillac	Small	Allante Conv.	SP	99.4	
	Midsize	Cimarron	4 DR	101.2	
		Eldorado	SP	108.0	
		Seville	SP	108.0	
	Large	Brougham 4D	SP	121.5	
		DeVille 2D	SP	110.8	
		DeVille 4D	SP	110.8	
		Fleetwood d'Elegance	SP	110.8	
		Fleetwood Limousine	SP	134.4	Limo/Formal Limo
Chevrolet	Small	Chevette	2 DR	94.3	
		Chevette	4 DR	97.3	
		Corvette	SP	96.2	

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Chevrolet (cont'd)		Corvette Conv.	SP	96.2	
		Nova	4 DR	95.7	
		Spectrum	2 DR	94.5	
		Spectrum	4 DR	94.5	
		Sprint	2 DR	88.4	ER
		Sprint	4 DR	92.3	
	Midsize	Beretta	2 DR	103.3	
		Camaro	SP	101.0	
		Cavalier	2 DR	101.2	CS,RS,Z24
		Cavalier	4 DR	101.2	CS,RS
		Cavalier	SW	101.2	CS,RS
		Cavalier Conv.	SP	101.2	RS
		Celebrity	2 DR	104.9	
		Celebrity	4 DR	104.9	
		Celebrity	SW	104.9	
		Corsica	4 DR	103.3	
		Monte Carlo	2 DR	108.1	
	Large	Astro Van	PV	111.0	MPV,Bus
		Caprice	2 DR	116.0	Classic
		Caprice	4 DR	116.0	Classic,Brougham
		Caprice	SW	116.0	Classic
Chrysler	Small	Daytona	2 DR	97.0	Pacifica,Shelby Z
	Midsize	LeBaron	2 DR	100.3	
		LeBaron	4 DR	100.3	
		LeBaron	SW	100.3	Town Country
		LeBaron Conv.	SP	100.3	
		LeBaron GTS	4 DR	103.1	
		New Yorker	4 DR	103.3	
	Large	New Yorker 5th Ave	4 DR	112.7	
		Newport	4 DR	112.7	
Chrysler/ Plymouth/ Mitsubishi	Small	Colt	2 DR	93.7	E,DL
		Colt	4 DR	93.7	E,DL,Premier
		Conquest	2 DR	95.9	
	Midsize	Colt Vista	SW	103.3	Vista
		Colt Vista 4WD	SW	103.5	Vista
Dodge	Small	Charger	2 DR	96.5	
		Daytona	2 DR	97.0	Pacifica,Shelby Z
		Omni	4 DR	99.1	
		Shadow	2 DR	97.0	
		Shadow	4 DR	97.0	
		Shelby	2 DR	96.5	
	Midsize	Aries	2 DR	100.3	LE
		Aries	4 DR	100.3	LE

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Dodge (cont'd)		Aries	SW	100.4	LE
		Lancer	4 DR	103.1	ES
		600	4 DR	103.3	SE
	Large	Caravan	PV	112.0	SE,LE
		Diplomat	4 DR	112.7	SE,Salon
Dodge/ Mitsubishi	Small	Colt	2 DR	93.7	E,DL
		Colt	4 DR	93.7	E,DL,Premier
	Midsize	Colt Vista	SW	103.3	Vista
		Colt Vista 4WD	SW	103.5	Vista
Ferrari	Small	328 Conv.	SP	92.1	
		328 GTB	SP	92.1	
		328 GTS	SP	92.1	
	Midsize	Mondial Conv.	SP	104.3	Cabriolet
		Mondial Quattroval	SP	104.3	
		Testarossa	SP	100.4	
Fiat	Small	X 1/9	SP	86.7	
Ford	Small	Escort	2 DR	94.2	GT,GL,Pony
		Escort	4 DR	94.2	GL
		Escort	SW	94.2	GL
		EXP	SP	94.2	Escort EXP Sport, Escort EXP Luxury
	Midsize	Mustang	SP	100.5	GT,LX
		Mustang Conv.	SP	100.5	GT,LX
		Taurus	4 DR	106.0	L,GL,LX,MT-5
		Taurus	SW	106.0	L,GL,LX,MT-5
		Tempo	2 DR	99.9	L,GL,LX,Sport
		Tempo	4 DR	99.9	L,GL,LX,Sport
		Tempo 4WD	2 DR	99.9	ALL Wheel
		Tempo 4WD	4 DR	99.9	ALL Wheel
		Thunderbird	2 DR	104.0	LX,Sport,Turbo
	Large	Aerostar	PV	118.9	Window Wagon
		Crown Victoria	2 DR	114.3	LX
		Crown Victoria	4 DR	114.3	LX,S
		Crown Victoria	SW	114.3	LX,S,Country Squire
GMC	Large	Safari Van	PV	111.0	MPV,Bus
Honda	Small	Civic	2 DR	93.7	DX,SI
		Civic	4 DR	96.5	
		Civic	SW	96.5	Wagovan

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Honda (cont'd)		Civic CRX	SP	86.0	CRX HF,CRX,CRX SI
		Civic 4WD	SW	96.5	
		Prelude	2 DR	96.5	SI
	Midsize	Accord	2 DR	102.4	LX,LXI
		Accord	4 DR	102.4	LX,LXI
Hyundai	Small	Excel	2 DR	93.7	GL,GLS
		Excel	4 DR	93.7	GL,GLS
Isuzu	Small	I-Mark	2 DR	94.5	
		I-Mark	4 DR	94.5	
		Impulse	2 DR	96.1	
Jaguar	Midsize	XJ-S	SP	102.0	
		XJ-SC	SP	102.0	
	Large	XJ6	SP	113.0	VDP
Lincoln	Midsize	Continental	SP	108.5	Givenchy
		Mark VII	SP	108.5	LSC,Blass
	Large	Town Car	SP	117.3	Cartier,Signature
Lotus	Small	Esprit Turbo	SP	96.0	
Maserati	Small	Biturbo	SP	98.9	
		Spyder Conv.	SP	94.4	
	Midsize	425 4D	SP	102.4	
	Large	Quattroporte	SP	110.2	
Mazda	Small	RX-7	SP	95.7	
		323	2 DR	94.5	
		323	4 DR	94.5	
		323	SW	94.5	
		626	2 DR	98.8	
		626	4 DR	98.8	
Mercedes Benz	Small	560SL Conv.	SP	96.7	Roadster
	Midsize	190D	SP	104.9	2.5L,2.5L Turbo
		190E	SP	104.9	2.3L,2.6L,2.3L 16V
	Large	260E	SP	110.2	
		300D	SP	110.2	
		300E	SP	110.2	

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Mercedes Benz (cont'd)		300SDL	SP	121.1	
		300TD	SP	110.2	
		420SEL	SP	121.1	
		560SEC	SP	112.0	
		560SEL	SP	120.9	
Mercury	Small	Lynx	2 DR	94.2	L,GS,XR3
		Lynx	4 DR	94.2	GS
		Lynx	SW	94.2	GS
		Tracer	2 DR	94.7	L,GS,LS
		Tracer	4 DR	94.7	GS,LS
	Midsize	Cougar	2 DR	104.0	XR-7,LS
		Sable	4 DR	106.0	GS,LS
		Sable	SW	106.0	GS,LS
		Topaz	2 DR	99.9	L,GS,LS,Sport
		Topaz	4 DR	99.9	L,GS,LS,Sport
	Large	Grand Marquis	2 DR	114.3	GS,LS
		Grand Marquis	4 DR	114.3	GS,LS
		Grand Marquis	SW	114.3	Colony Park, Colony Park LS
Merkur	Midsize	Scorpio	SP	108.7	
		XR4Ti	SP	102.7	
Mitsubishi	Small	Cordia	2 DR	96.3	High/Prem(L/LS), Special
		Mirage	2 DR	93.7	Medium,High/Prem (L/LS),Special
		Mirage	4 DR	93.7	High/Prem(L/LS)
		Starion	2 DR	95.9	High/Prem(L/LS)
		Tredia	4 DR	96.3	High/Prem(L/LS), Special
		Wagon	PV	88.0	
	Midsize	Galant	4 DR	102.4	High/Prem(L/LS)
Nissan	Small	Pulsar	2 DR	95.7	XE,SE
		Sentra	2 DR	95.7	
		Sentra	4 DR	95.7	
		Sentra	SW	95.7	
		Sentra 4WD	SW	95.7	XE
		Stanza	SW	99.0	
		Stanza 4WD	SW	99.0	
		Van	PV	92.5	
		200SX	2 DR	95.5	
		300ZX	SP	91.3	300 ZX

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Nissan		300ZX 2+2	SP	99.2	300 ZX
(cont'd)	Midsize	Maxima	4 DR	100.4	
		Maxima	SW	100.4	GXE
		Stanza	4 DR	100.4	
Oldsmobile	Midsize	Calais	2 DR	103.4	Supreme
		Calais	4 DR	103.4	Supreme
		Cutlass	2 DR	108.1	Cutlass Supreme, Salon, Supreme Brougham
		Cutlass	4 DR	108.1	Cutlass Supreme, Supreme Brougham
		Cutlass Ciera	2 DR	104.9	Ciera LS,Ciera Brougham
		Cutlass Ciera	4 DR	104.9	Ciera LS,Ciera Brougham
		Cutlass Ciera	SW	104.9	Cruiser,Ciera Brougham
		Firenza	2 DR	101.2	S,GT,LC
		Firenza	4 DR	101.2	LX
		Firenza	SW	101.2	
		Toronado	SP	108.0	Brougham
	Large	Custom Cruiser	SW	116.0	
		Delta 88	2 DR	110.8	Royale,Royale Brougham
		Delta 88	4 DR	110.8	Royale,Royale Brougham
		Ninety-Eight	2 DR	110.8	Regency,Regency Brougham
		Ninety-Eight	4 DR	110.8	Regency,Regency Brougham
Peugeot	Midsize	505	4 DR	108.0	
	Large	505	SW	114.2	
Plymouth	Small	Horizon	4 DR	99.1	
		Sundance	2 DR	97.0	
		Sundance	4 DR	97.0	
		Turismo	2 DR	96.5	
	Midsize	Caravelle	4 DR	103.3	Special Edition
		Reliant	2 DR	100.3	LE
		Reliant	4 DR	100.3	LE
		Reliant	SW	100.4	LE
	Large	Gran Fury	4 DR	112.7	Salon
		Voyager	PV	112.0	SE,LE

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Pontiac	Small	Fiero	SP	93.4	SE,Sport,GT
		Firefly	2 DR	88.4	
		1000	2 DR	94.3	
		1000	4 DR	97.3	
	Midsize	Firebird	SP	101.0	Trans/Am
		Grand Am	2 DR	103.4	LE,SE
		Grand Am	4 DR	103.4	LE,SE
		Grand Prix	2 DR	108.1	Brougham,LE
		Sunbird	2 DR	101.2	SE,GT
		Sunbird	4 DR	101.2	GT
		Sunbird	SW	101.2	
		Sunbird Conv.	SP	101.2	SE,GT
		6000	2 DR	104.9	
		6000	4 DR	104.9	LE,SE,STE
		6000	SW	104.9	LE,SE
	Large	Bonneville	4 DR	110.8	LE
		Safari Wagon	SW	116.0	Safari
Porsche	Small	911 Coupe	SP	89.5	Turbo
		911 Targa/Cabriolet	SP	89.5	
		924 Coupe	SP	94.5	S
		928 Coupe	SP	98.4	S
		944 Coupe	SP	94.5	Turbo,S
Renault	Small	Alliance	2 DR	97.8	L,DL,GS
		Alliance	4 DR	97.8	L,DL
		Alliance Conv.	SP	97.8	L,DL
		GTA	2 DR	97.8	
		GTA Conv.	SP	97.8	
Rolls Royce	Large	Camargue	SP	120.5	
		Corniche Conv.	SP	120.5	
		Silver Spirit	SP	120.5	
		Silver Spur	SP	124.0	
Saab	Small	900	2 DR	99.1	S,Turbo
		900	4 DR	99.1	S
		900 Conv.	SP	99.1	Turbo
	Midsize	9000	SP	105.1	S,Turbo
Subaru	Small	DL/GL	2 DR	97.2	DL,GL,GL Turbo
		DL/GL	4 DR	97.2	DL,GL,GL Turbo,GL-10, GL-10 Turbo

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Subaru (cont'd)		DL/GL	SW	97.0	DL,GL,GL Turbo,GL-10, GL-10 Turbo
		DL/GL 4WD	SW	97.0	DL,GL,GL Turbo,GL-10 Turbo
		GL 4WD	2 DR	97.0	GL,GL Turbo,RX Turbo
		GL 4WD	4 DR	97.0	GL,GL-10 Turbo, RX Turbo
		Hatchback	2 DR	93.7	STD,GL
		Hatchback 4WD	2 DR	93.3	STD,GL
		Justy	2 DR	90.0	DL,GL
		XT Coupe	2 DR	97.0	GL,GL Turbo,GL-10, GL-10 Turbo
		XT Coupe DL	SP	97.0	DL
		XT Coupe 4WD	2 DR	97.0	GL,GL-10 Turbo
Toyota	Small	Celica	2 DR	99.4	ST,GT,GT-S
		Celica Conv.	SP	99.4	GT-S
		Corolla	2 DR	94.5	SR5 Sport,GT-S (Hawaii)
		Corolla	4 DR	95.7	Deluxe,Luxury Edition
		Corolla FX	2 DR	95.7	FX16
		MR2	SP	91.3	T-Bar
		Tercel	2 DR	93.7	Deluxe
		Tercel	4 DR	93.7	Deluxe
		Tercel	SW	95.7	Deluxe
		Tercel 4WD	SW	95.7	Deluxe,SR5
		Van	PV	88.0	Deluxe,Luxury Edition
		Van 4WD	PV	88.0	Luxury Edition
	Midsize	Camry	4 DR	102.4	Deluxe,Luxury Edition
		Camry	SW	102.4	Deluxe,Luxury Edition
		Cressida	4 DR	104.5	Luxury Edition
		Cressida	SW	104.5	Luxury Edition
		Supra	SP	102.2	Sport Roof,Turbo
TVR	Small	280i 2D	SP	94.0	
		280i Conv.	SP	94.0	
Volkswagen	Small	Cabriolet	SP	94.5	
		Fox	2 DR	92.8	
		Fox	4 DR	92.8	GL
		Fox	SW	92.8	GL
		Golf	2 DR	97.3	GL,GT
		Golf	4 DR	97.3	GL,GT
		GTI	2 DR	97.3	16V
		Jetta	2 DR	97.3	
		Jetta	4 DR	97.3	GLI

(See notes on page 21.)

Make Name	Vehicle Size Class	Series Name	Body Style	Wheel Base	Models Included
Volkswagen (cont'd)		Scirocco	2 DR	94.5	16V
		Vanagon	PV	96.9	Bus
	Midsize	Quantum	4 DR	100.4	
		Quantum	SW	100.4	
		Quantum 4WD	SW	100.4	
Volvo	Midsize	240	4 DR	104.3	DL/GL
		240	SW	104.3	DL/GL
		740/760	SP	109.1	Grand Luxe Exec(GLE)
		740/760 SW	SP	109.1	Grand Luxe Exec(GLE)
		780	SP	109.1	Grand Luxe Exec(GLE)
Yugo	Small	Yugo	2 DR	84.7	GV

Size Class:

S (Small) — wheelbase (after rounding to nearest inch) less than 100.
M (Midsize) — wheelbase (after rounding to nearest inch) in the range 100-109
L (Large) — wheelbase (after rounding to nearest inch) greater than 109.

Body Style Abbreviations:

2Dr — Two-door
4Dr — Four-door
Conv — Convertible
PV — Passenger Van
SP — Sports and Specialty
SW — Station Wagon

HLDI Publications

Research reports published by the Highway Loss Data Institute are:

R72-1 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1972 Models,* June 1973.

R73-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1973 Models Compared with 1972 Models,* September 1973.

R73-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models,* March 1974.

R73-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two Years,* December 1974.

R73-4 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Three Years,* December 1975.

R74-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1974 Models,* May 1974.

R74-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year,* December 1974.

R74-3 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Two Years,* December 1975.

R75-1 *Automobile Insurance Losses, Collision Coverages, Initial Results for 1975 Models,* July 1975.

R75-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1975 Models During Their First Year,* December 1975.

R76-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1976 Models,* June 1976.

R76-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1976 Models During Their First Year, 1975 Models During Their First Two Years, 1974 Models During Their First Three Years,* December 1976.

R77-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1977 Models,* June 1977.

R77-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1977 Models During Their First Year, 1976 Models During Their First Two Years, 1975 Models During Their First Three Years,* December 1977.

R78-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1978 Models,* June 1978.

R78-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1978 Models During Their First Year, 1977 Models During Their First Two Years, 1976 Models During Their First Three Years,* January 1979.

R79-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1979 Models,* June 1979.

R79-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1979 Models During Their First Year, 1978 Models During Their First Two Years, 1977 Models During Their First Three Years,* December 1979.

R80-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1980 Models,* June 1980.

R80-2 *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

R81-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1981 Models,* July 1981.

R81-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981 Models During Their First Year, 1980 Models During Their First Two Years, 1979 Models During Their First Three Years,* December 1981.

R82-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1982 Models,* July 1982.

R82-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1982 Models During Their First Year, 1981 Models During Their First Two Years; 1980 Models During Their First Three Years,* December 1982.

R83-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1983 Models,* June 1983.

R83-2 *Insurance Losses, Collision Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1983 Models During Their First Year, 1982 Models During Their First Two Years, 1981 Models During Their First Three Years,* January 1984.

R84-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1984 Models,* June 1984.

R84-2 *Insurance Losses, Collision Coverages; Passenger Vehicles, Vans, Pickups, and Utility Vehicles; 1984 Models During Their First Year, 1983 Models During Their First Two Years, 1982 Models During Their First Three Years,* January 1985.

R85-1 *Automobile Insurance Losses, Collision Coverages; Initial Results for 1985 Models,* July 1985.

R85-2 *Insurance Collision Report, Passenger Vehicles, Vans, Pickups, and Utility Vehicles, 1985 Models During Their First Year, 1984 Models During Their First Two Years, 1983 Models During their First Three Years,* January 1986.

R86-1 *Insurance Collision Report, Initial Results for 1986 Automobiles,* August 1986.

R86-2 *Insurance Collision Report, Passenger Cars, Vans, Pickups, and Utility Vehicles, 1986 Models During Their First Year, 1985 Models During Their First Two Years, 1984 Models During Their First Three Years* December 1986.

R87-1 *Insurance Collision Report, Initial Results for 1987 Automobiles,* July 1987.

V78-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1978 Models During Their First Year, 1977 Models During Their First Two Years,* February 1979.

V79-1 *Automobile Insurance Losses, Non-Commercial Collisions Coverages; Variations by Make and Series, Vans, Pickups and Utility Vehicles; 1979 Models During Their First Year, 1978 Models During Their First Two Years,* April 1980.

V79-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Vans, Pickup Trucks, and Utility Vehicles,* October 1980.

V79-3 *Insurance Theft Losses; Vans, Pickups, and Utility Vehicles, 1979 Models,* May 1981.

V80-1 *Automobile Insurance Losses, Non-Commercial Collision Coverages; Variations by Make and Series, Vans, Pickups, and Utility Vehicles; 1980 Models During Their First Year, 1979 Models During Their First Two Years, 1978 Models During Their First Three Years,* December 1980.

V80-2 *Automobile Insurance Losses, Personal Injury Protection Coverages; Injury Claim Frequency Results by Size of Claim; Vans, Pickup Trucks, and Utility Vehicles, 1977-1980 Models,* September 1981.

I75-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974 and 1975 Models,* June 1976.

I75-2 *Automobile Insurance Losses, Percentage of Collision Claims with Associated Injury Claims for 1974 and 1975 Models,* March 1977.

I76-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models,* November 1977.

I76-2 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1974, 1975, and 1976 Models,* September 1978.

I77-1 *Automobile Insurance Losses, Injury Coverages; Claim Frequency Results for 1977 Models,* September 1978.

I78-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results for 1977 and 1978 Models,* September 1979.

I79-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim for 1977, 1978, and 1979 Models,* October 1980.

I80-1 *Automobile Insurance Losses, Personal Injury Protection Coverages; Claim Frequency Results by Size of Claim; 1978-1980 Models,* September 1981.

I81-1 *Insurance Losses, Personal Injury Protection Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1979-1981 Models,* September 1982.

I82-1 *Insurance Losses, Personal Injury Protection Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1980-1982 Models,* September 1983.

I83-1 *Insurance Losses, Personal Injury Protection Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1981-1983 Models,* September 1984.

I84-1 *Insurance Losses, Personal Injury Protection Coverages; Passenger Cars, Vans, Pickups, and Utility Vehicles; 1982-1984 Models,* August 1985.

I85-1 *Insurance Injury Report, Passenger Cars, Vans, Pickups, and Utility Vehicles; 1983-1985 Models,* August 1986.

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